DOCO

door-solutions

Installation Manual

EXS40**R**

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1. Symbols

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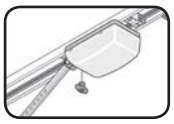
Manually operated



Electrically operated

2. General warnings

This manual has been prepared by qualified personnel, not by trainees or DIY enthusiasts.
The person tasked with assembling, disassembling, maintaining or putting the door system into operation must carefully read, understand and follow this manual.
In case of doubt, always contact DOCO International.
To avoid severe personal injury, carefully read and observe all the indications and warnings in this manual.

- This manual describes the assembly, disassembly and maintenance of your Residential Door System **EXS**40**R**. This may be supplemented by other manuals, for example the panel assembly manual and operator manual (if applicable).
- This Residential Door System **EXS**40**R** has been designed in accordance with the latest European standards. However, you must check yourself whether this standard corresponds with the local national standard.
- All measurements are in millimetres unless otherwise specified.
- After installation, ensure that the CE marking label has been completed and attached.
- Keep this manual in a safe place, near the residential door.
- Subject to technical changes, without written notice.

2.1 Safety requirements for assembly, maintenance and first use.

- This Residential Door System **EXS**40**R** may only be mounted, connected and put into operation by qualified personnel.
- Make sure that the power is switched off and remains switched off while electrical work is being carried out!
- Never bridge safety devices!
- Adding or omitting parts can compromise the door operation and thus the safety of the Residential Door System **EXS**40**R**.
  This is therefore strongly discouraged!
- Some parts may contain sharp edges: use protective gloves.
- All references in this manual to the door/component handing are as viewed from the inside looking out, unless otherwise specified.
- Never use the Residential Door System **EXS**40**R** if visual damage is observed, particularly with respect to cables, springs and safety devices.
- When performing assembly/maintenance, always wear at least gloves and safety boots and safety goggles for all drilling/cutting activities!
- Make sure that you always have a stable environment in which to perform your work.
- Secure the assembly/maintenance site with safety ribbon to keep others at a distance.
- Maintenance must only be performed by a qualified company and/or qualified personnel.
- Make sure there is enough light.
- Only use appropriate tools.

3. Terms and conditions

Our general terms of delivery and payments apply to all our offers, agreements or subsequent revisions.
A copy of our terms and conditions are available on request or may be downloaded from our website:

www.doco-international.com

Subject to technical changes without notice

4. Area of application

This hardware set has been developed for installation in garages in the private sector:
- Maximum width 3000 mm
- Maximum height 2500 mm
- Weight door leaf maximum 100 kg
- Maximum temperature range outside*: -20 C° to + 50 C°
- Relative humidity 20 – 90%
- Lifetime: 25,000 cycles.

* Big differences in temperature between the inside and outside may cause deflection in the panel leaf (bi-metal effect). Dark coloured panels are particularly susceptible to this problem and should be avoided. Care should be taken during manual handling due to the risk of damage.

5. Guidelines

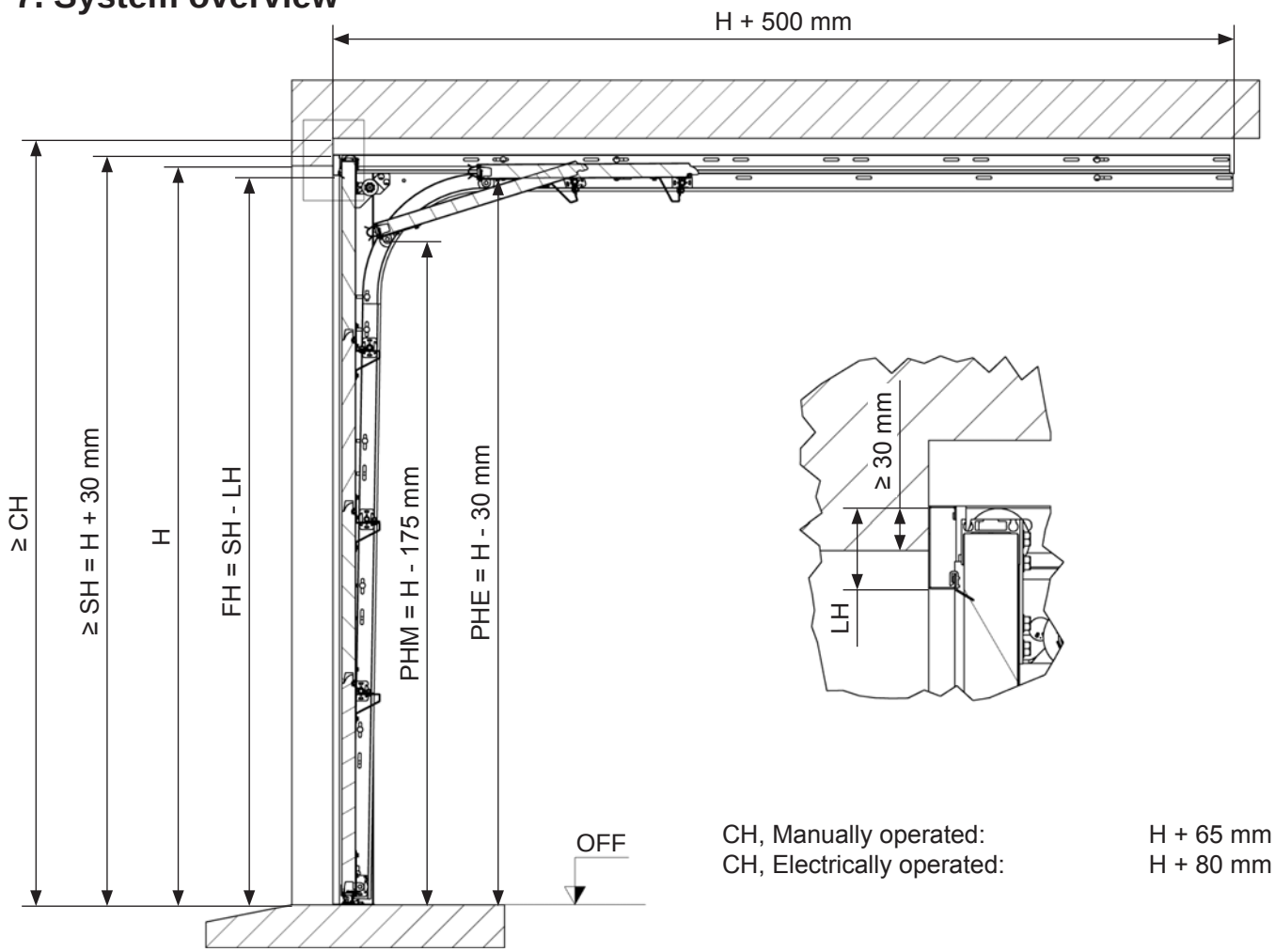
DOCO International had the “Product Test“ of this door (Initial Type Testing = ITT) carried out by the SP institute in Sweden, known as Notified Body No. 0402.
In consultation with DOCO, documents pertaining to this ITT may be transferred to the company producing the door. This is necessary to complete the Technical File.
NOTE: CE-approved only using the correct DOCO components.

! The installation company is responsible for ensuring that the chosen E-operator and panels comply with product standard EN13241-1 and that the necessary ITTr has been performed.
If a wicket door is to be installed, the installation company is responsible for ensuring that the entire door complies with product standard EN13241-1 and that the necessary ITT has been performed.

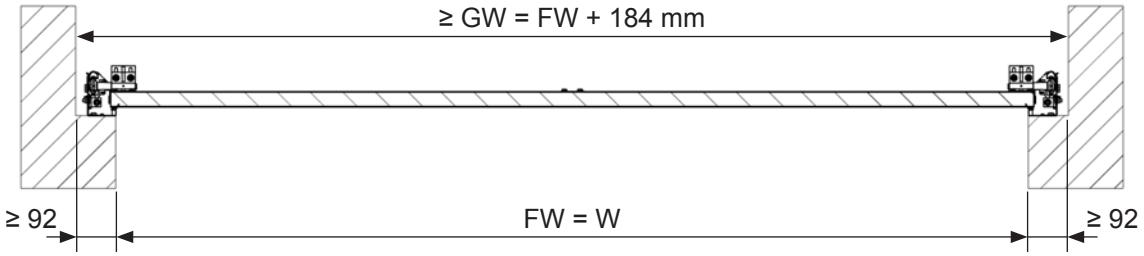
6. Fixing material building

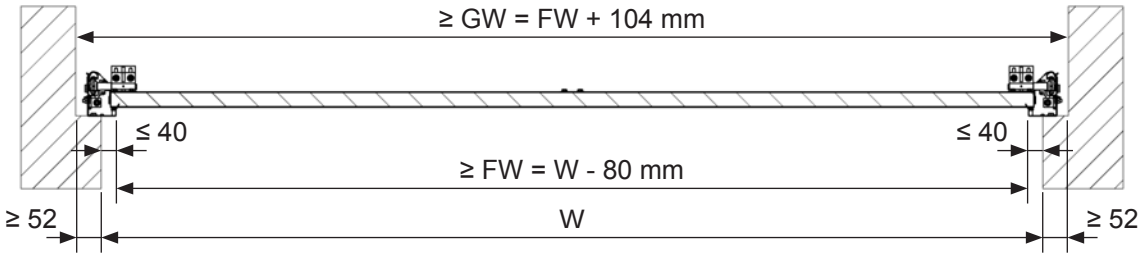
! The necessary fittings to fix the Residential Door System **EXS**40**R** to the building and/or ceiling are not included!
The installation company is responsible for ensuring that the building structure is safe/strong enough to accept the door and its fittings.
The installation company is also responsible for using the correct fixing materials on the right foundation (stone, concrete, steel, wood).
No specifications will therefore be included in the image section.

7. System overview



CH, Manually operated:	H + 65 mm
CH, Electrically operated:	H + 80 mm

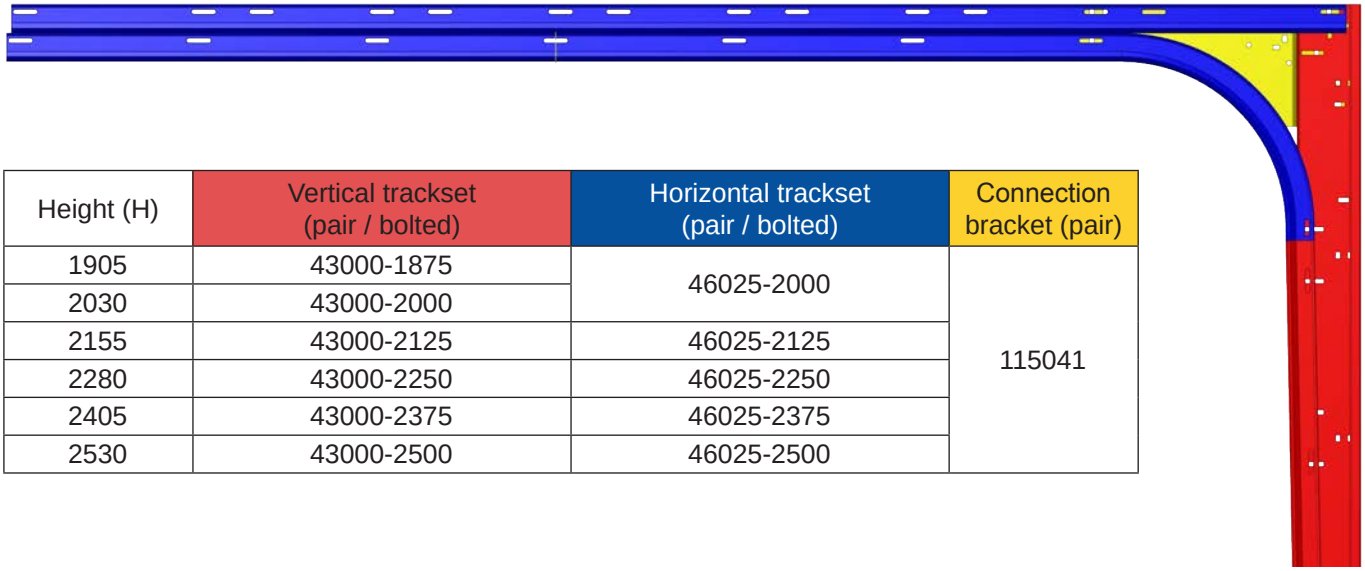




H	= Clear opening height	PHM	= Free passing height manually operated
SH	= System height	PHE	= Free passing height electrical operated
CH	= Ceiling height	W	= Clear opening width
FH	= Frame height	FW	= Frame width
LH	= Lintel height	GW	= Garage width

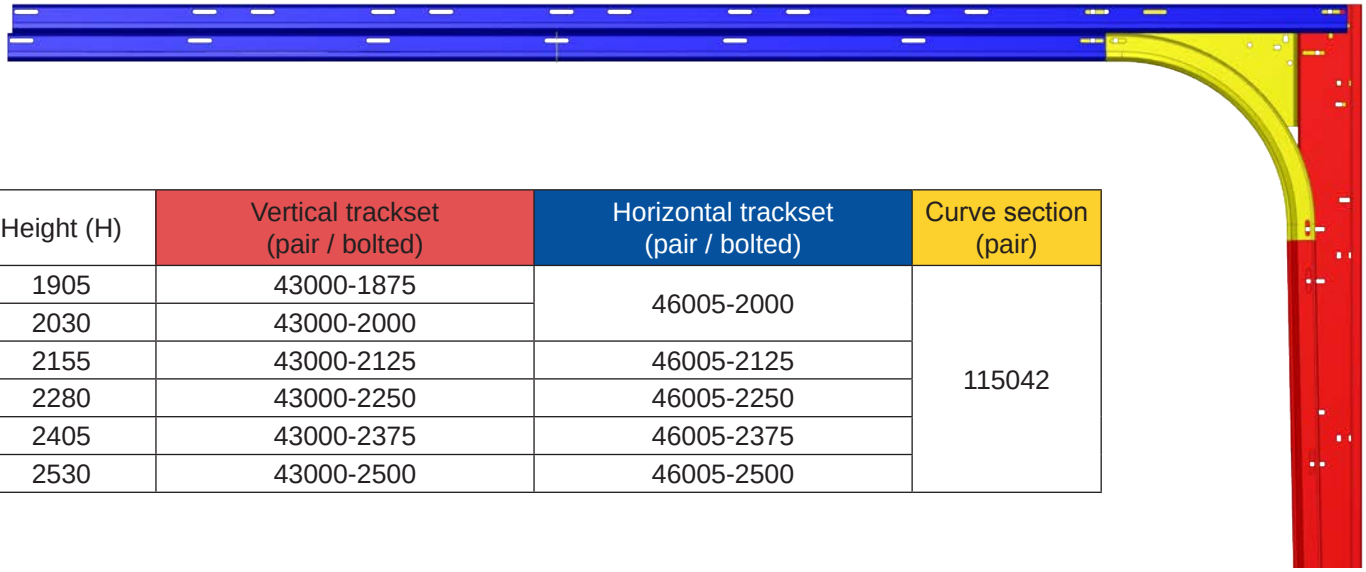
7.1 Pre-assembled tracksets overview EXS40R

Vertical trackset and horizontal trackset with side connection bracket



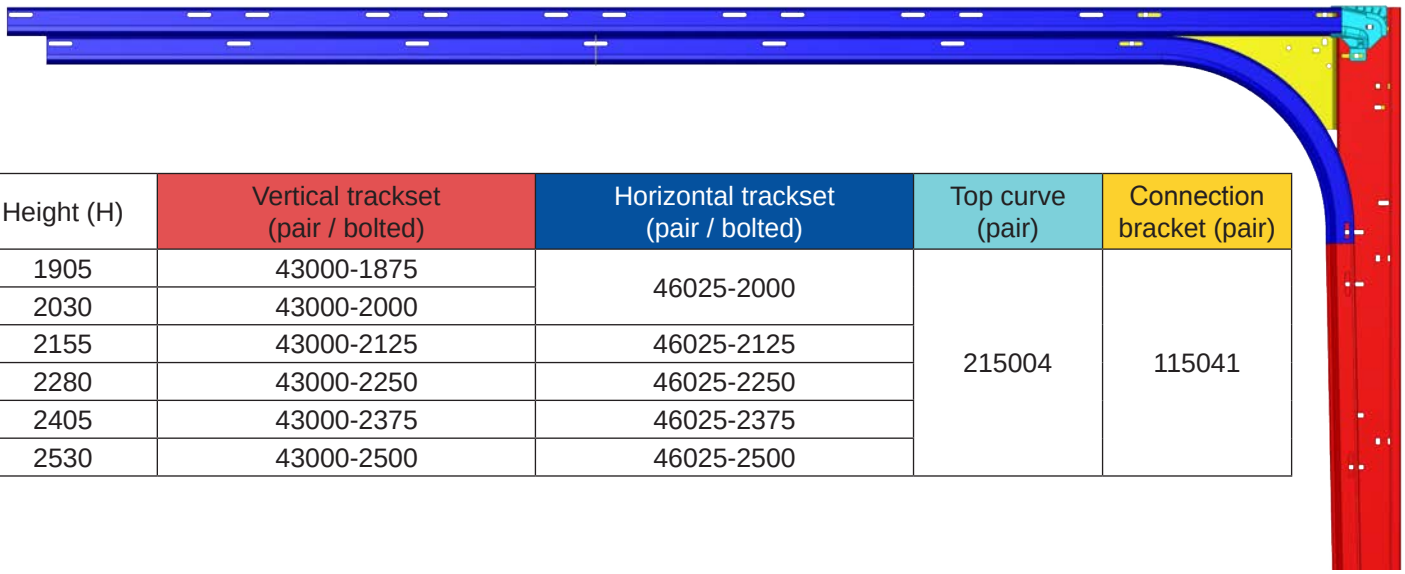
Height (H)	Vertical trackset (pair / bolted)	Horizontal trackset (pair / bolted)	Connection bracket (pair)
1905	43000-1875	46025-2000	115041
2030	43000-2000		
2155	43000-2125	46025-2125	
2280	43000-2250	46025-2250	
2405	43000-2375	46025-2375	
2530	43000-2500	46025-2500	

Vertical trackset and horizontal trackset with curve section



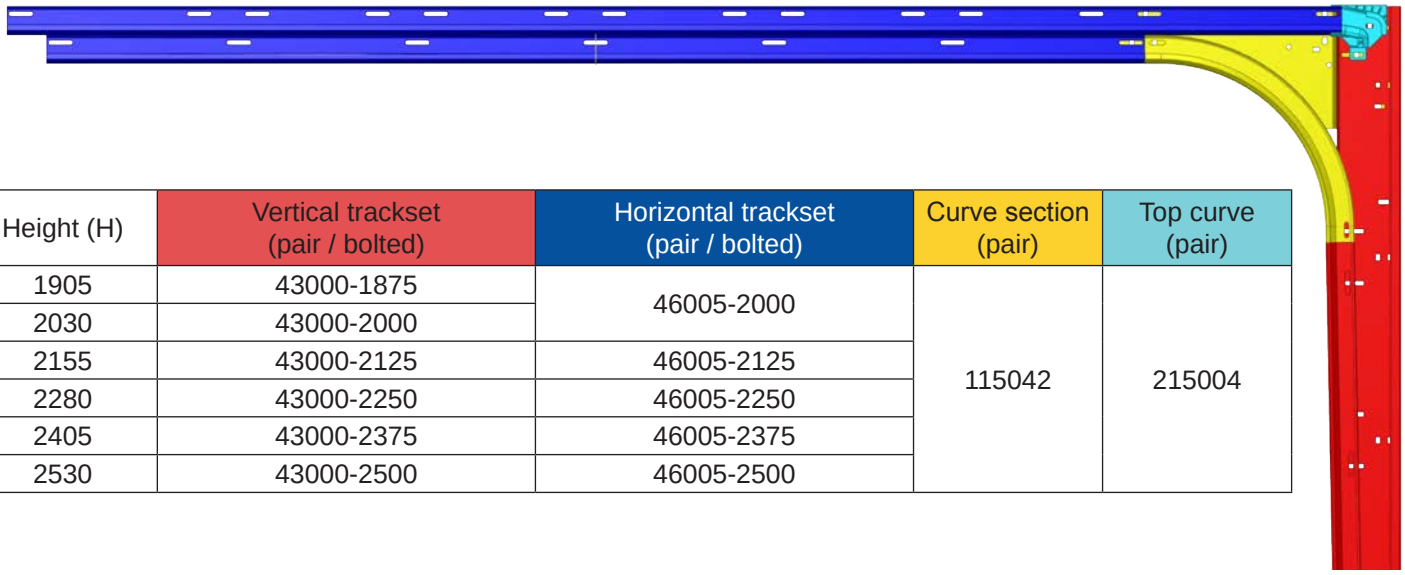
Height (H)	Vertical trackset (pair / bolted)	Horizontal trackset (pair / bolted)	Curve section (pair)
1905	43000-1875	46005-2000	115042
2030	43000-2000		
2155	43000-2125	46005-2125	
2280	43000-2250	46005-2250	
2405	43000-2375	46005-2375	
2530	43000-2500	46005-2500	

Vertical trackset and horizontal trackset with side connection bracket and top curve



Height (H)	Vertical trackset (pair / bolted)	Horizontal trackset (pair / bolted)	Top curve (pair)	Connection bracket (pair)
1905	43000-1875	46025-2000	215004	115041
2030	43000-2000			
2155	43000-2125	46025-2125		
2280	43000-2250	46025-2250		
2405	43000-2375	46025-2375		
2530	43000-2500	46025-2500		

Vertical trackset and horizontal trackset with curve section and top curve



Height (H)	Vertical trackset (pair / bolted)	Horizontal trackset (pair / bolted)	Curve section (pair)	Top curve (pair)
1905	43000-1875	46005-2000	115042	215004
2030	43000-2000			
2155	43000-2125	46005-2125		
2280	43000-2250	46005-2250		
2405	43000-2375	46005-2375		
2530	43000-2500	46005-2500		

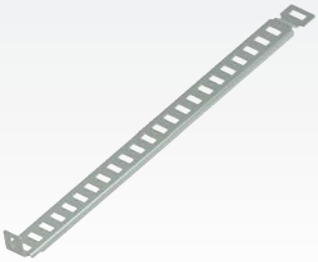
7.2 Spring and cable matrix EXS40R

Door weight [kg] (min .. max)	Door height [mm] (min - max)					
	1780 - 1905	1906-2030	2031-2155	2156-2280	2281-2405	2406-2530
40 ≤ .. ≤ 45	115376	115375	115375	N/A	N/A	N/A
45 < .. ≤ 50	115377	115376	115376	115375	115375	N/A
50 < .. ≤ 55	115378	115377	115377	115376	115376	115375
55 < .. ≤ 60	115380	115378	115377	115377	115376	115376
60 < .. ≤ 65	115382	115380	115378	115379	115377	115377
65 < .. ≤ 70	115384	115382	115380	115381	115379	115377
70 < .. ≤ 75	115386	115384	115382	115381	115381	115379
75 < .. ≤ 80	115386	115386	115384	115383	115383	115381
80 < .. ≤ 85	115390	115388	115386	115384	115383	115383
85 < .. ≤ 90	115392	115390	115388	115387	115385	115383
90 < .. ≤ 95	115393	115392	115391	115389	115387	115385
95 < .. ≤ 100	115394	115393	115391	115389	115389	115387

Door height [mm] (min .. max)	Cable set
1780 - 1850	115210-1760
1851 - 1965	115210-1875
1966 - 2090	115210-2000
2091 - 2215	115210-2125
2216 - 2340	115210-2250
2341 - 2465	115210-2375
2466 - 2530	115210-2500

Notes:
- Max. door weight 100 kg (System limit)
- Door weights in matrix indicates complete effective door weight, including all hardware
- Each article nb. in matrix contains 2 equal duplex tension springs for each door
- Electrical operator is recommended for best operation of the door

7.3 Standard hardware box EXS40R - 115945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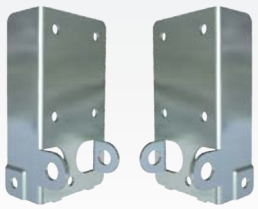

1 x 25051 (pair)

1 x 25003 (pair)

10 x 250003

20 x 14020

1 x 115020 (pair)

2 x 115025

2 x 115028

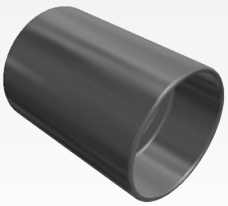
2 x 115029

2 x 115034

2 x 115035

2 x 115038

4 x 150001


4 x 150003

10 x 150106

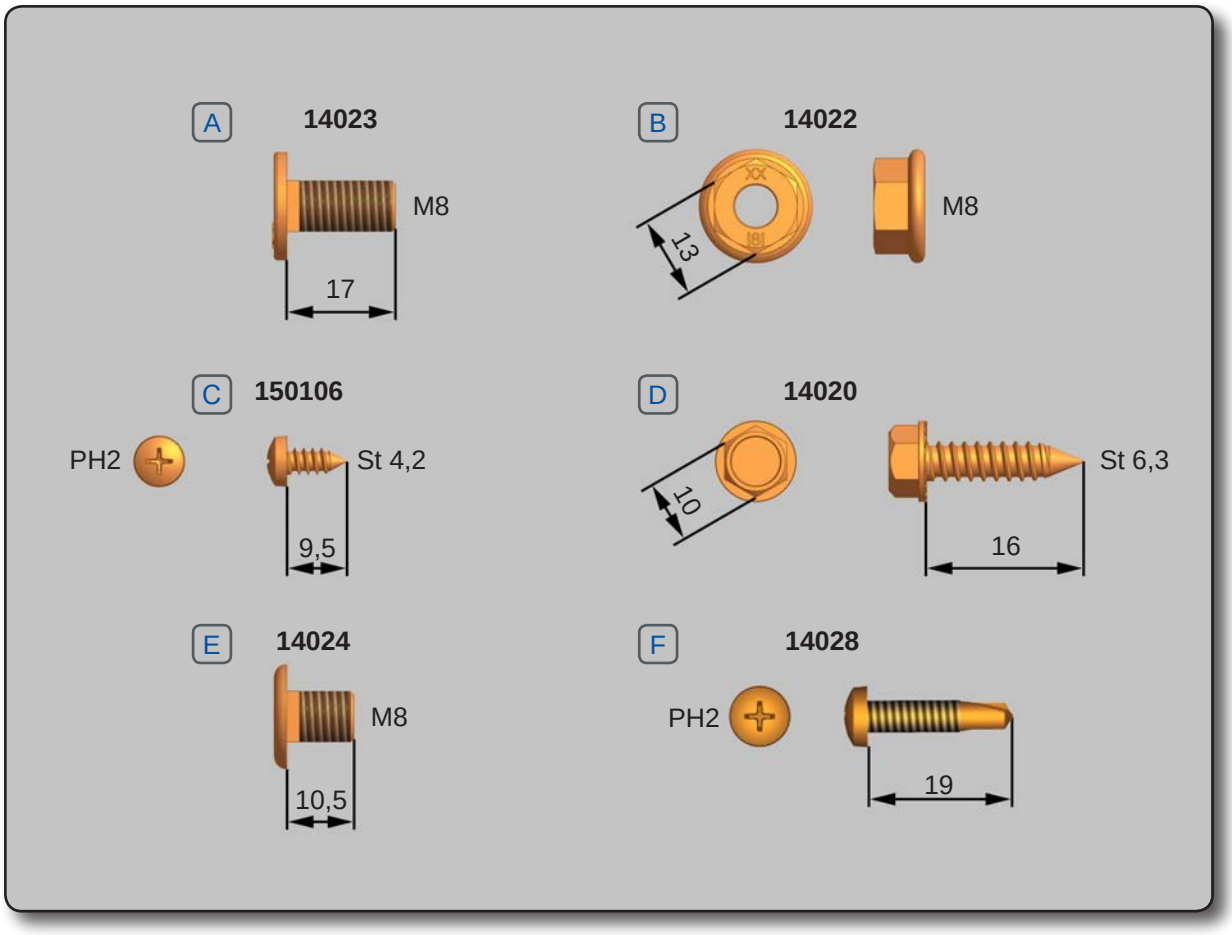
2 x 150108

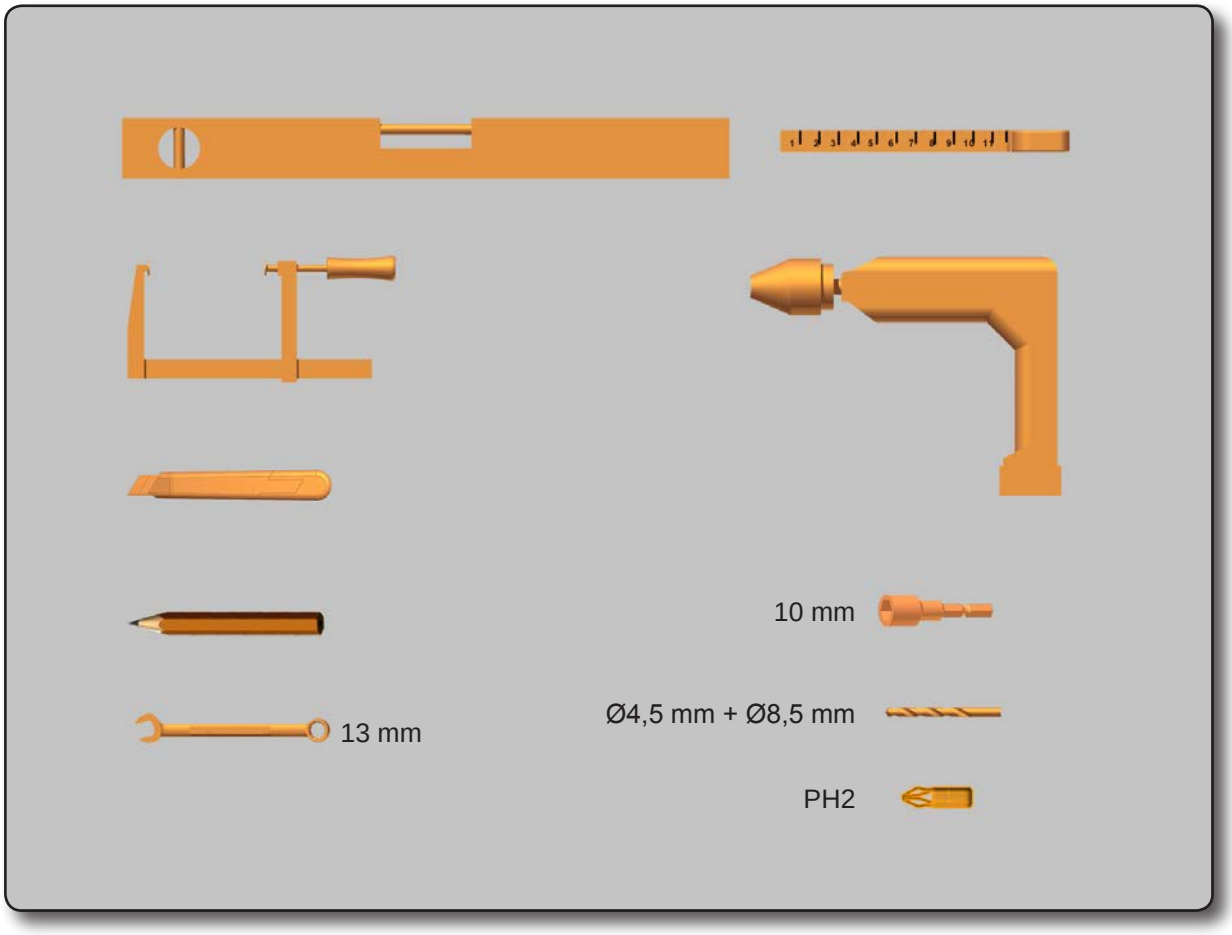
28 x 14022

18 x 14023

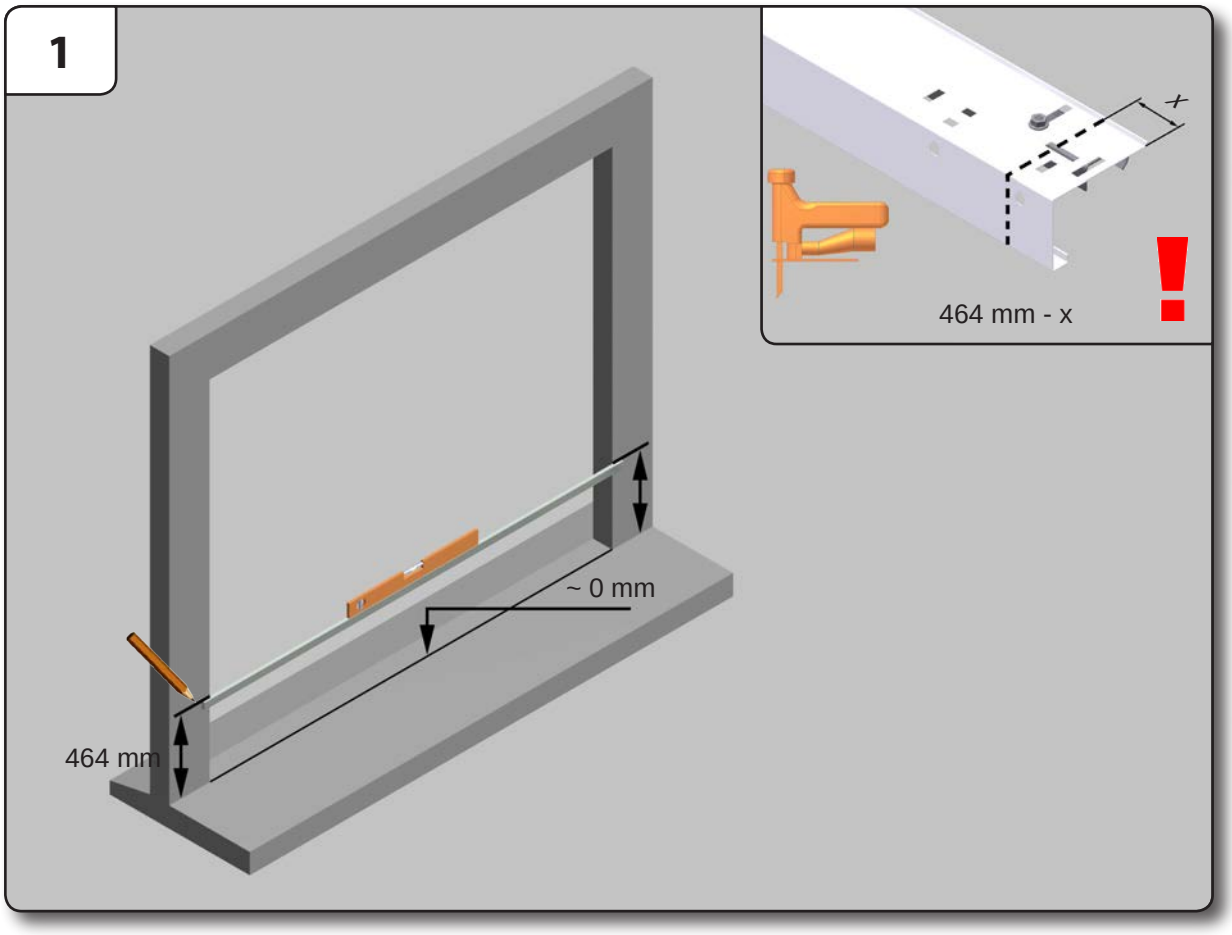
8 x 14024

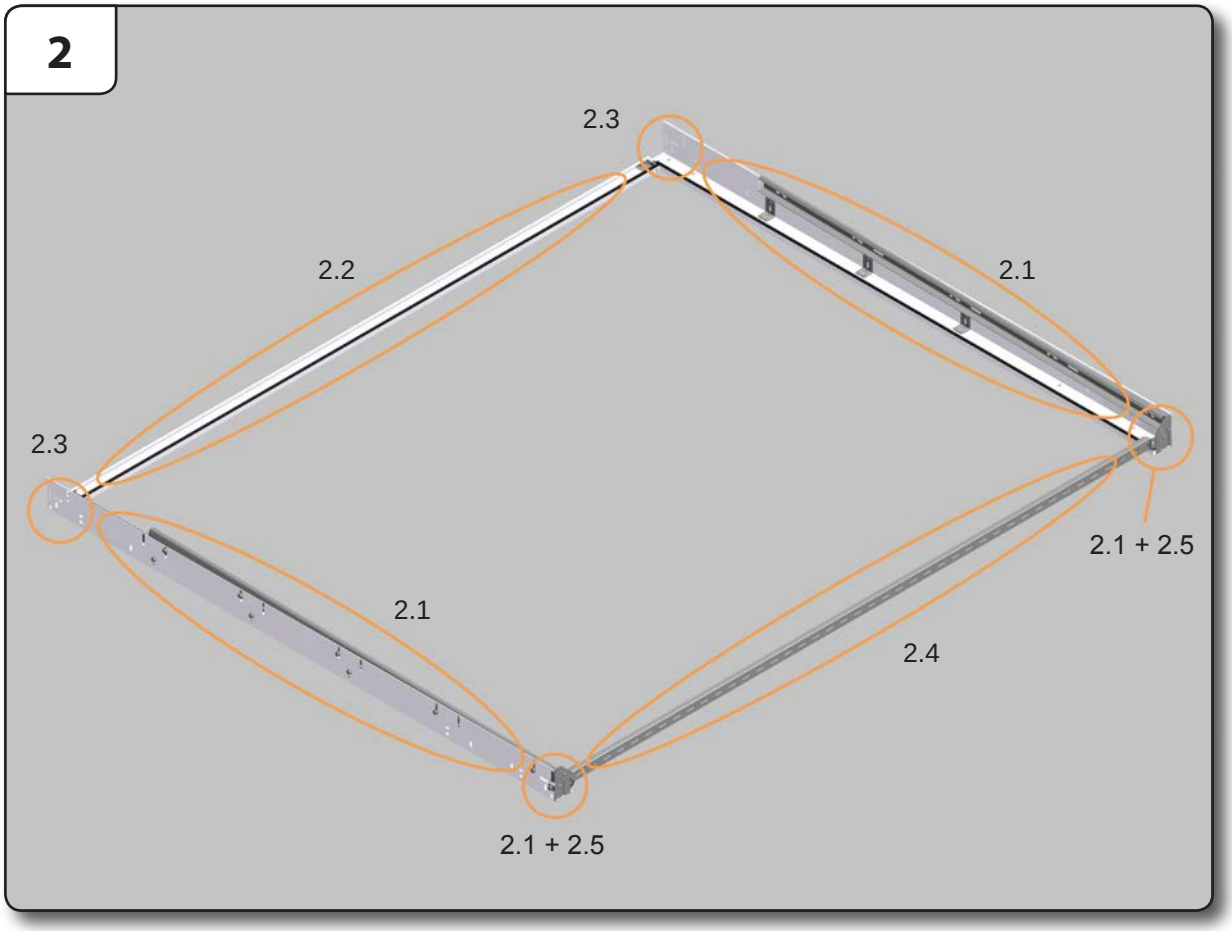
8. Fasteners and tools

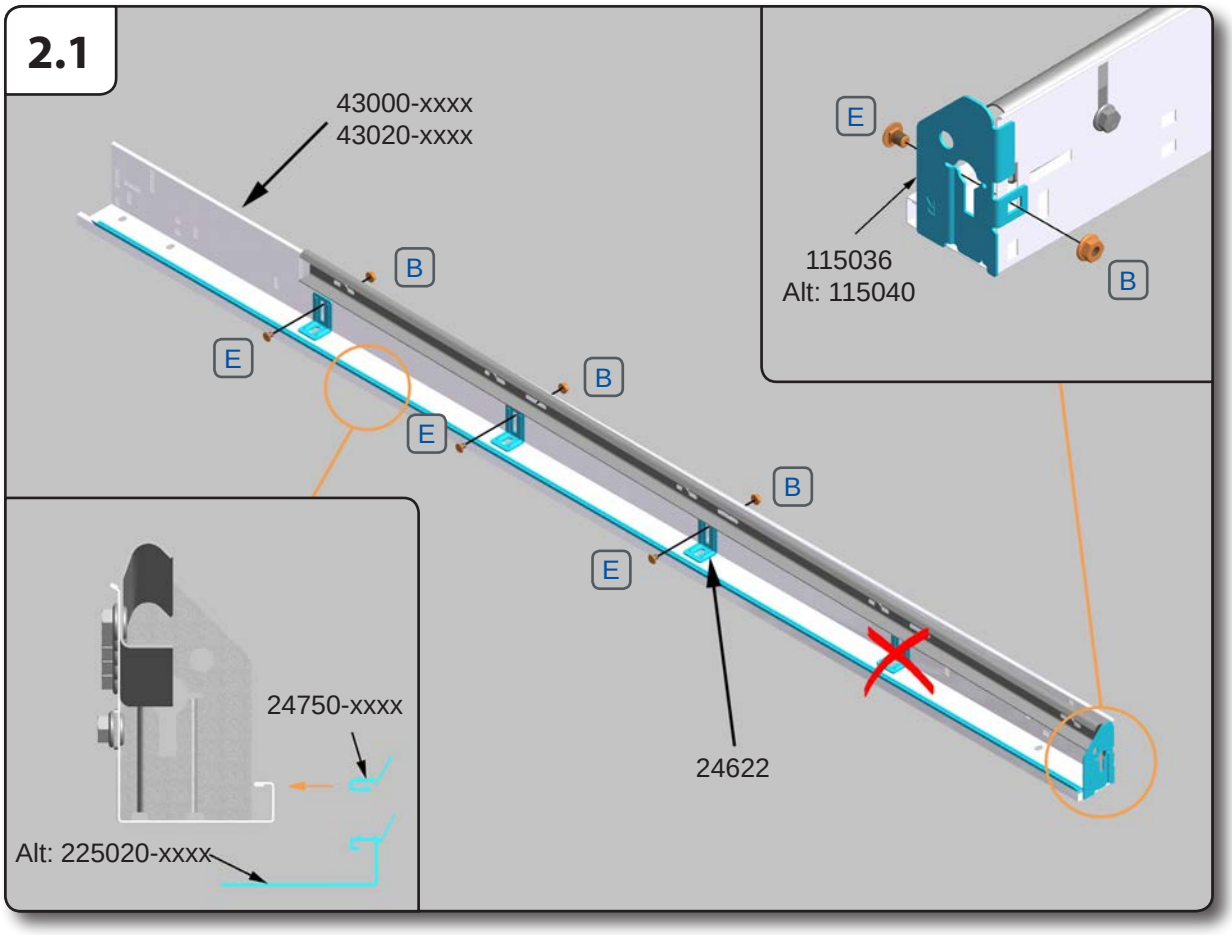


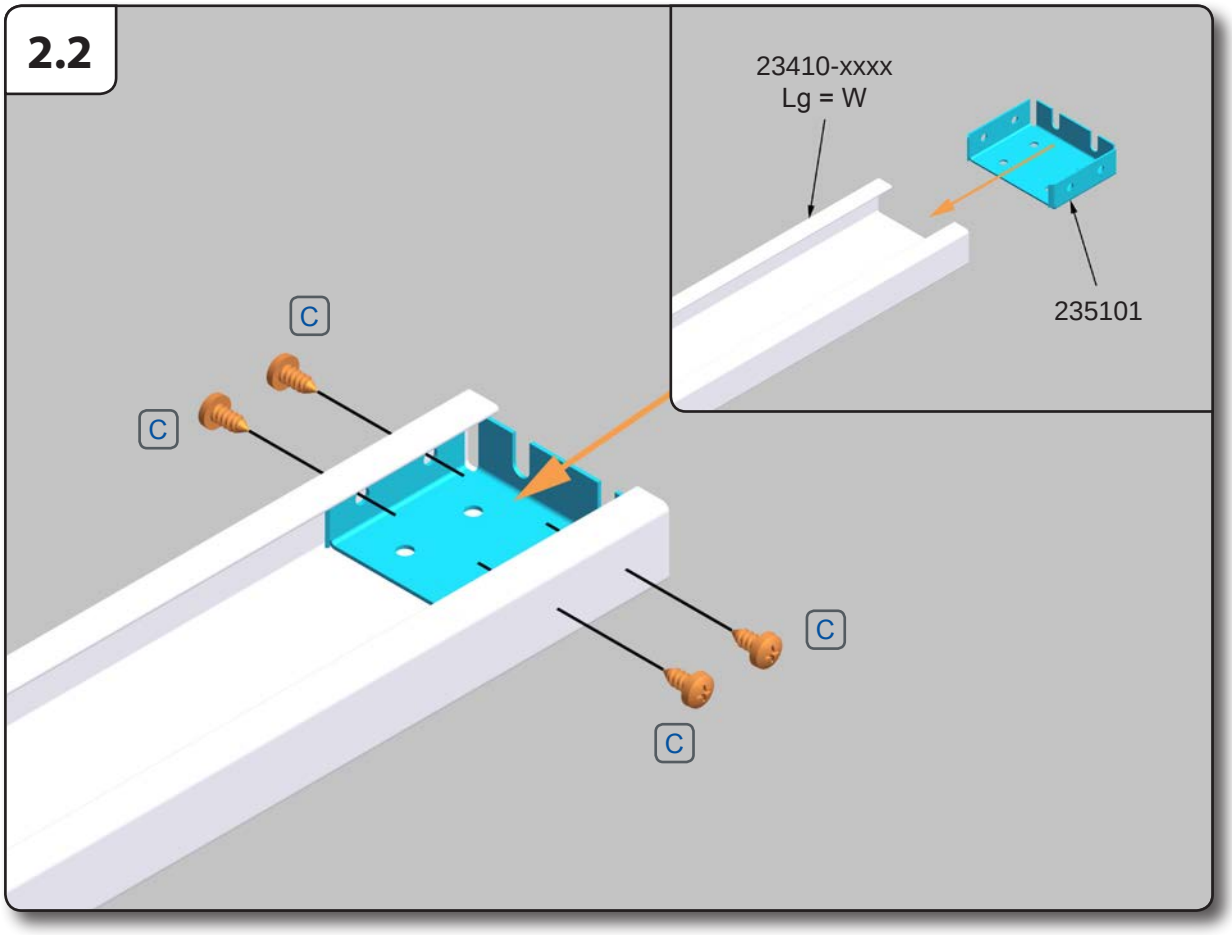


9. Assembly instructions






2.1
43000-xxxx
43020-xxxx
B
E
B
E
B
E
E
B
115036
Alt: 115040
24750-xxxx
Alt: 225020-xxxx
24622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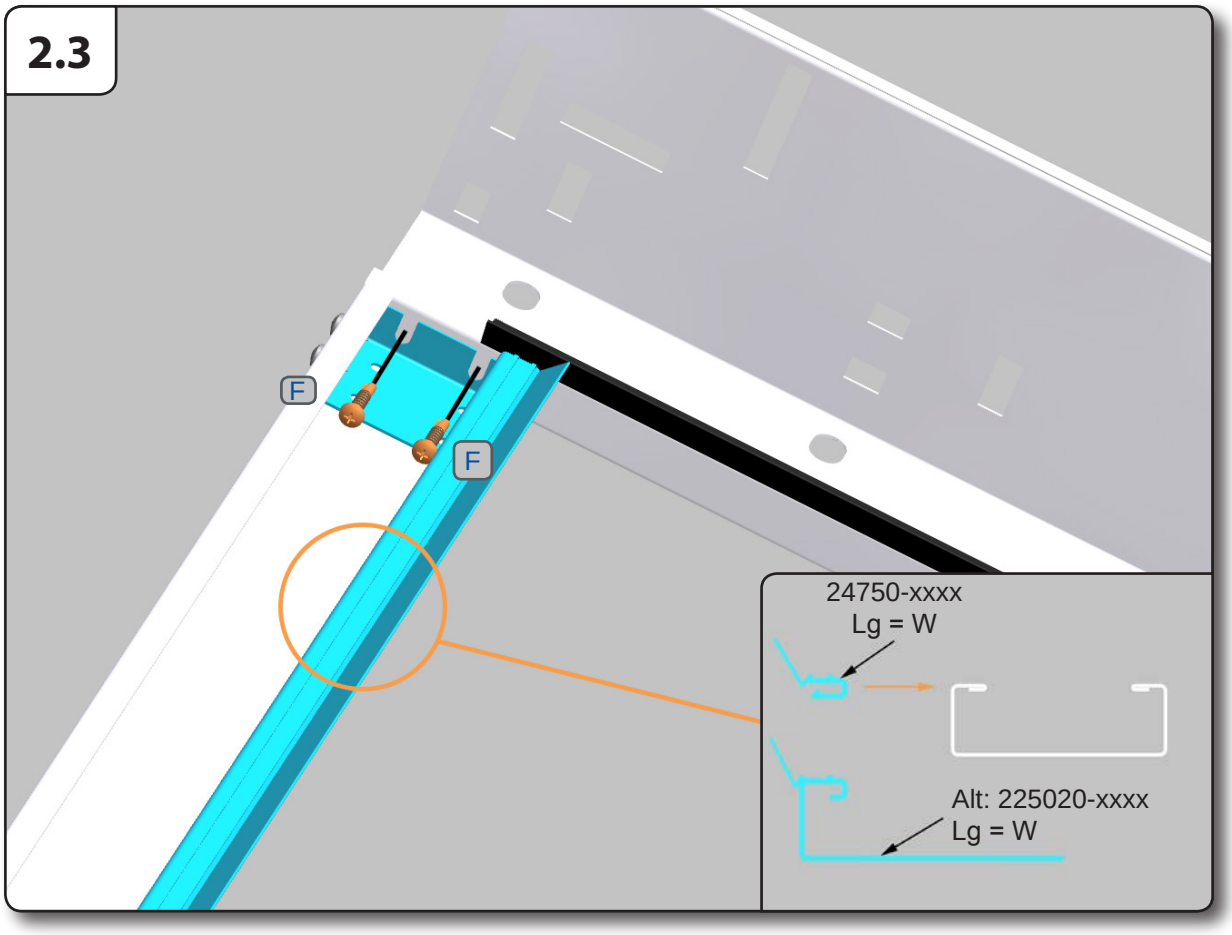
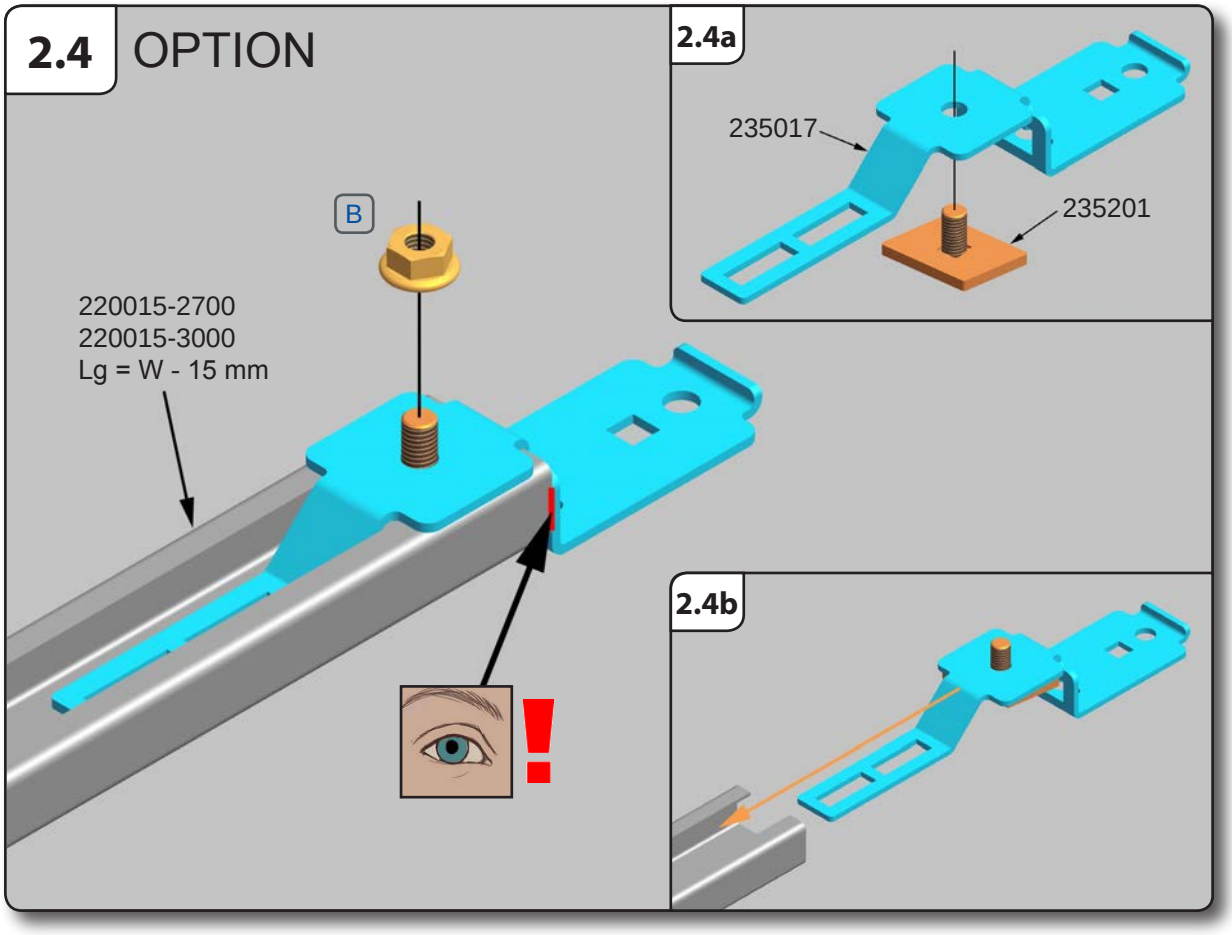
Lg = W
235101
C
C
C
C


2.3
F
F
24750-xxxx
Lg = W
Alt: 225020-xxxx
Lg = W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B
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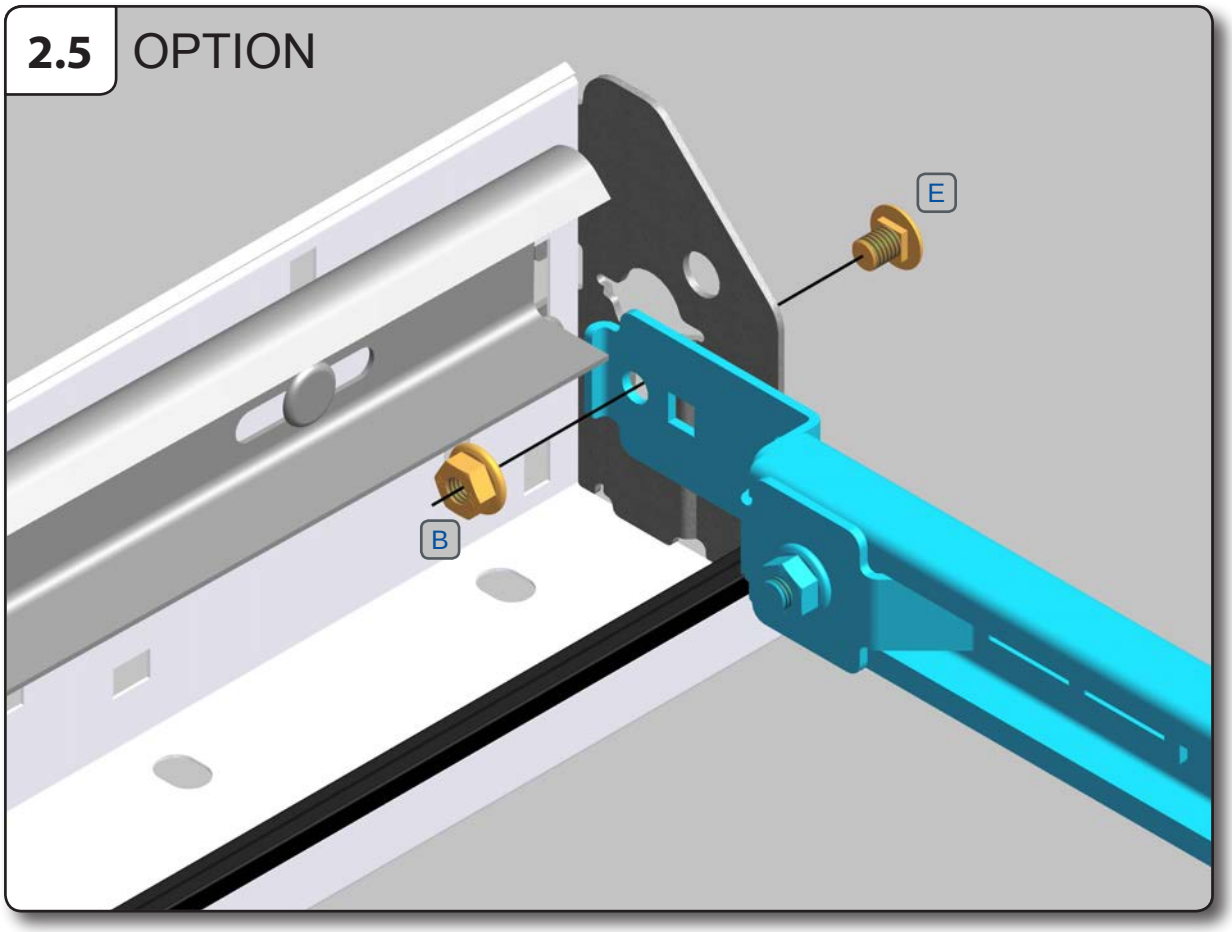
220015-3000
Lg = W - 15 mm
2.4a
235017
235201
2.4b

2.5 OPTION



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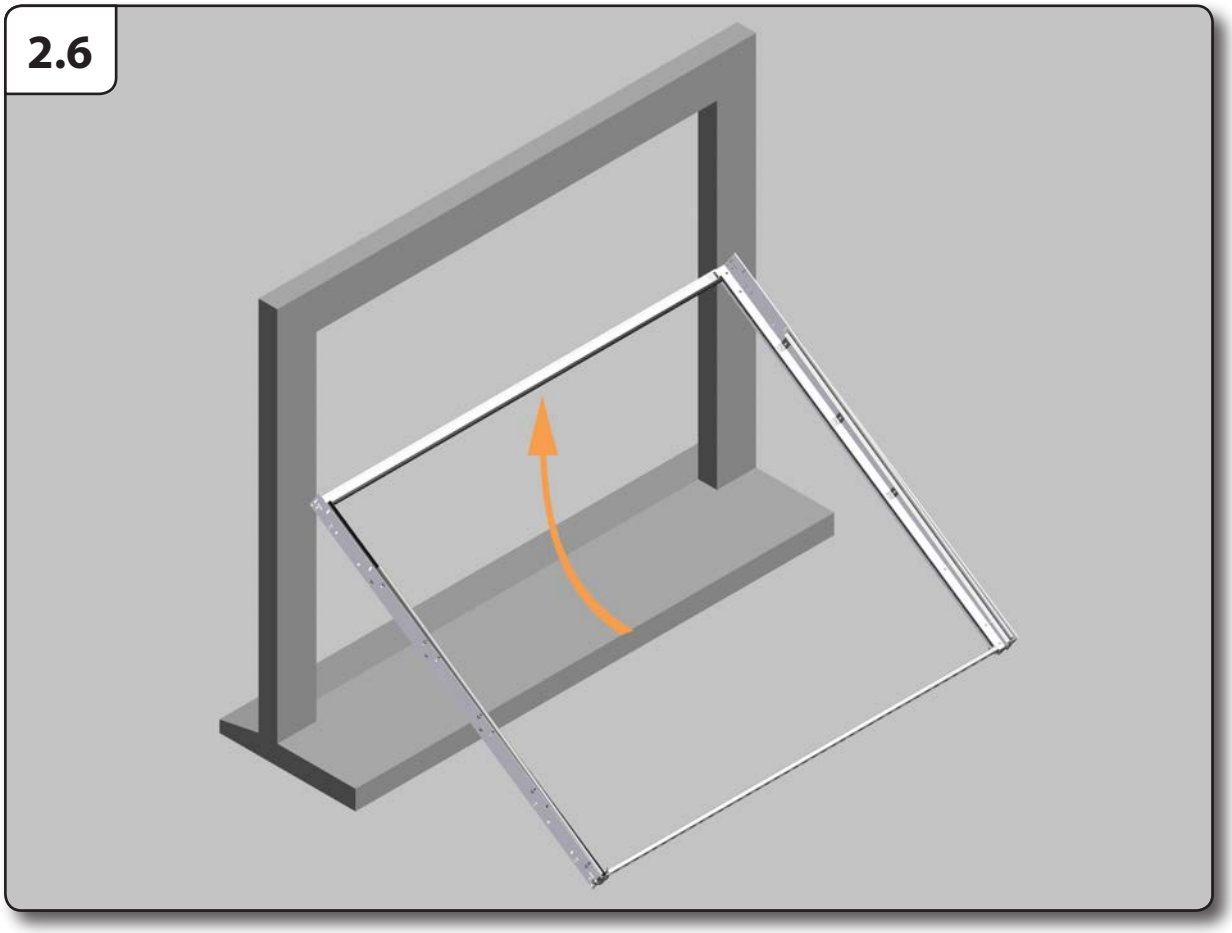

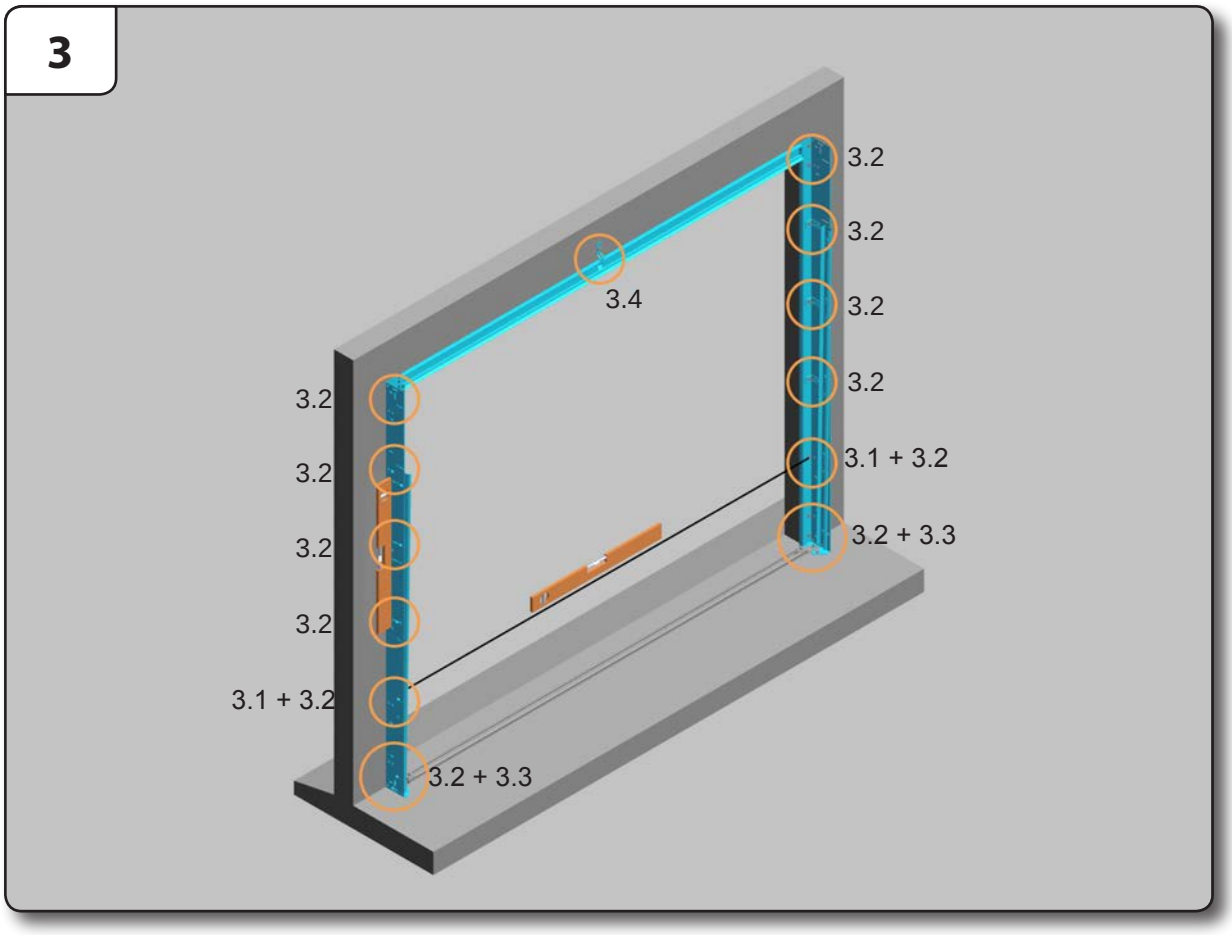
3
3.2
3.2
3.2
3.2
3.1 + 3.2
3.2 + 3.3
3.4
3.2
3.2
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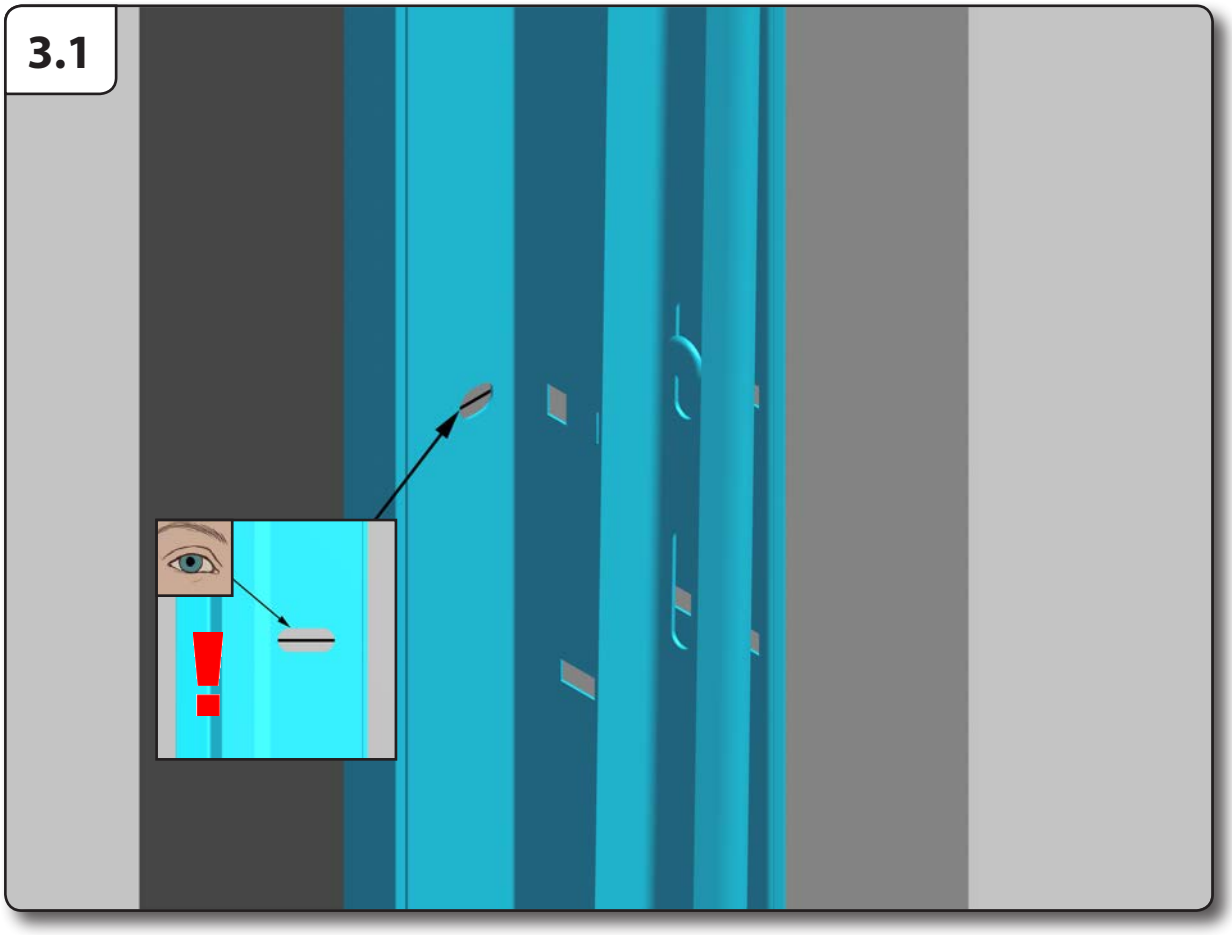
3.2
3.1 + 3.2
3.2 + 3.3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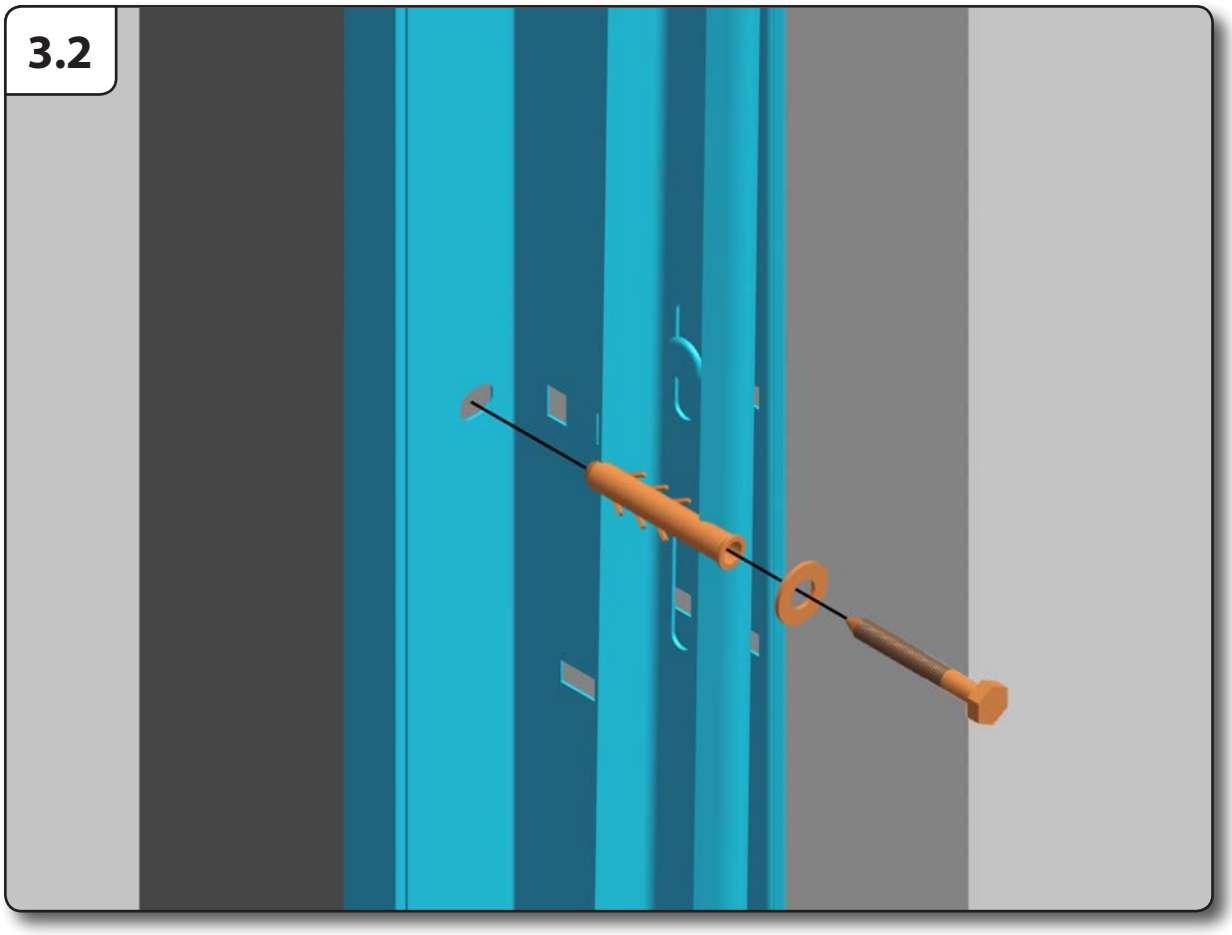
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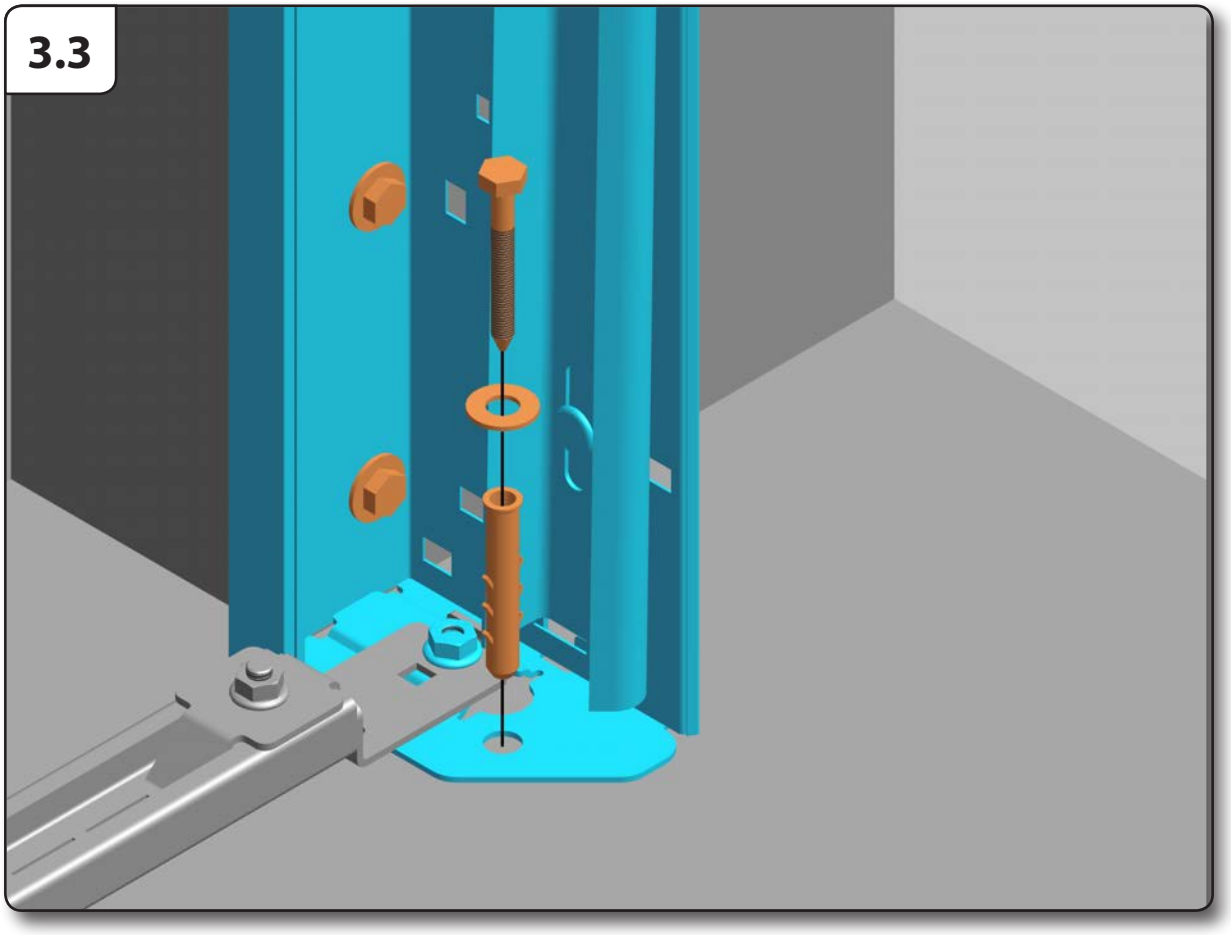
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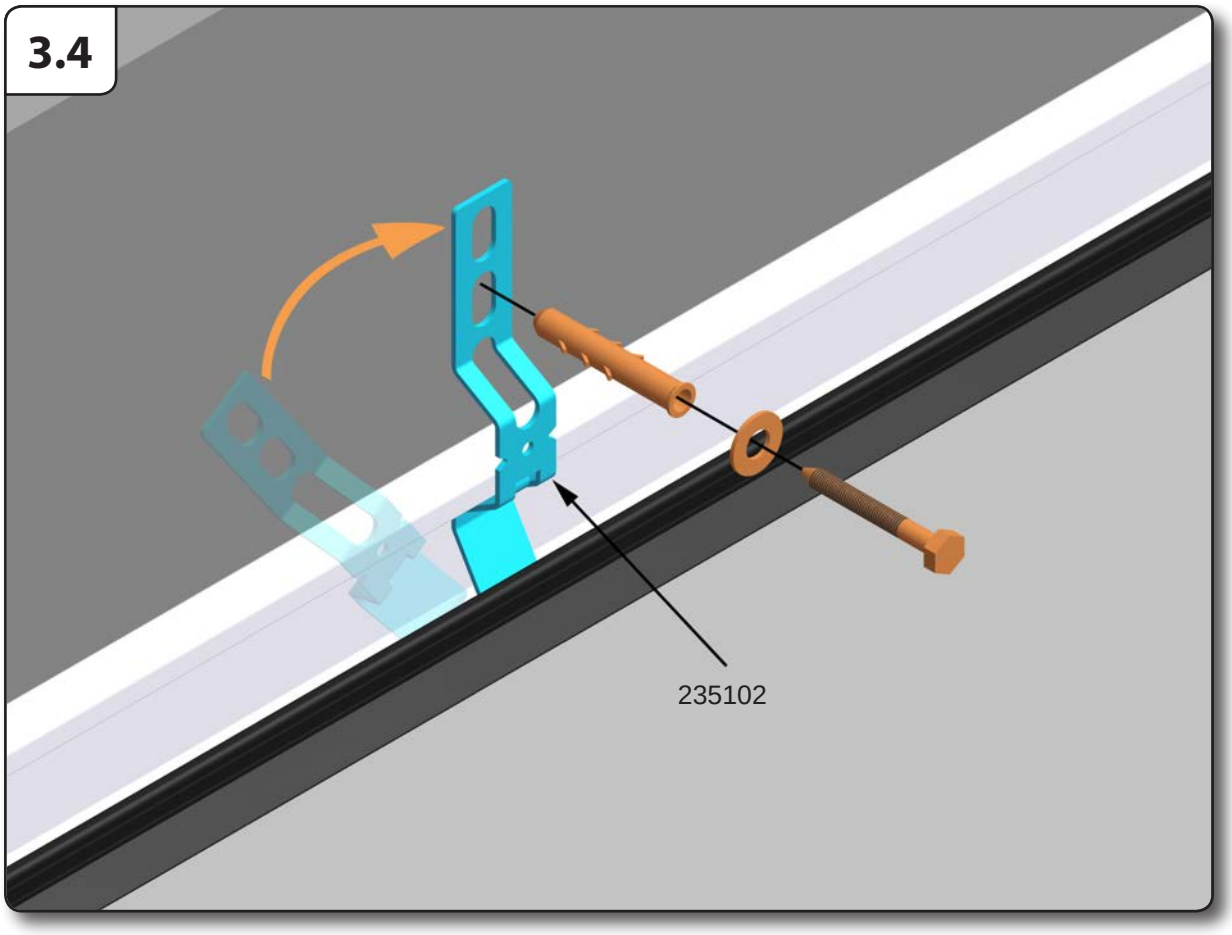
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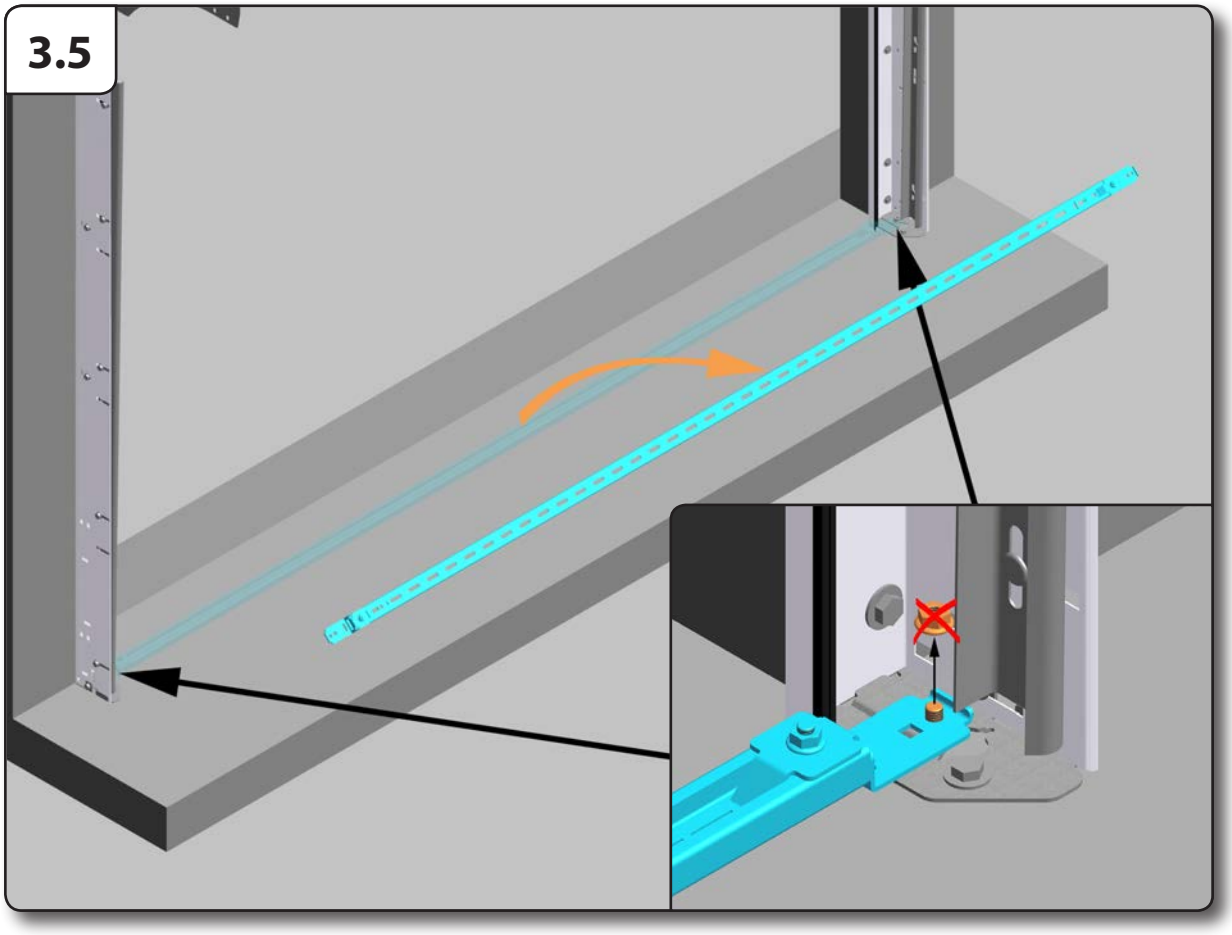
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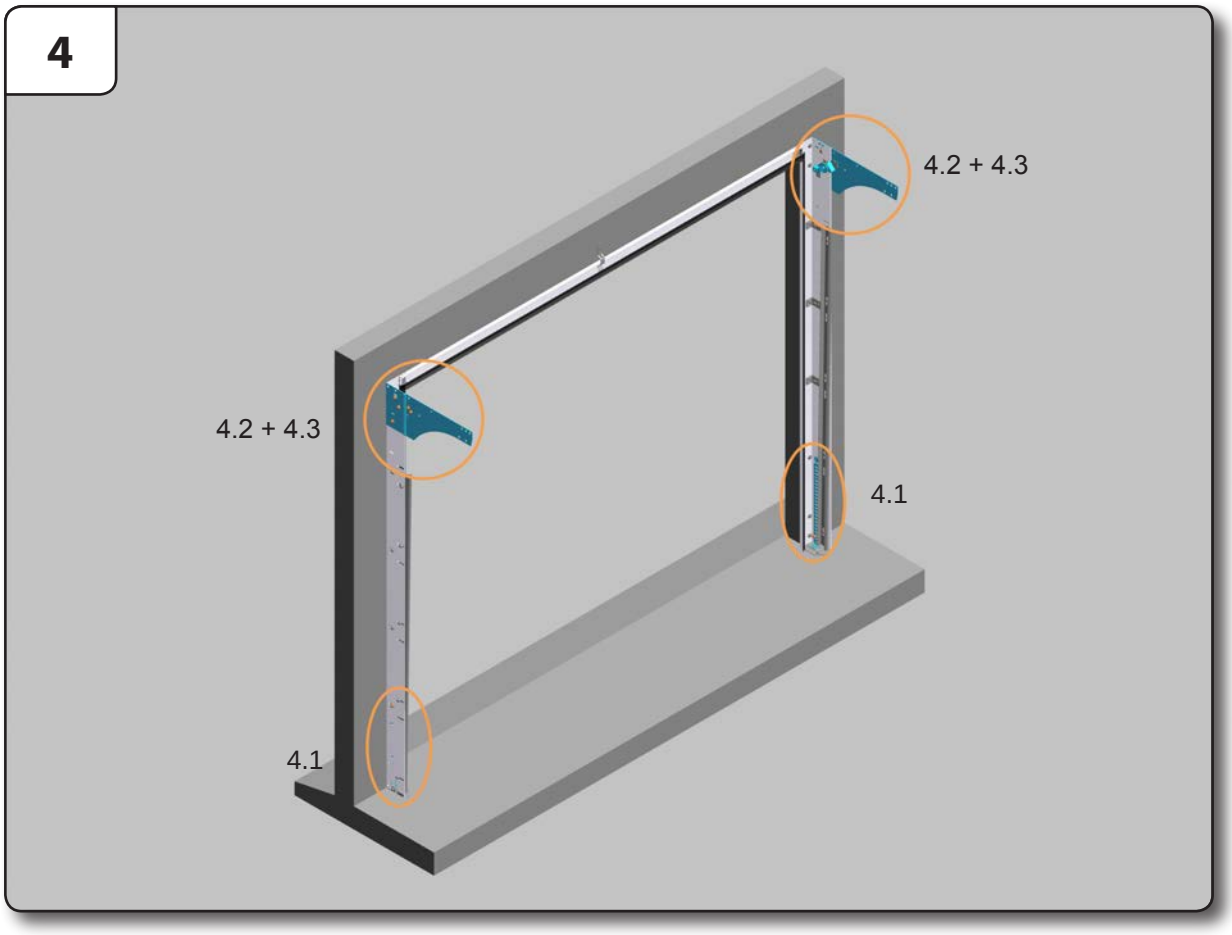
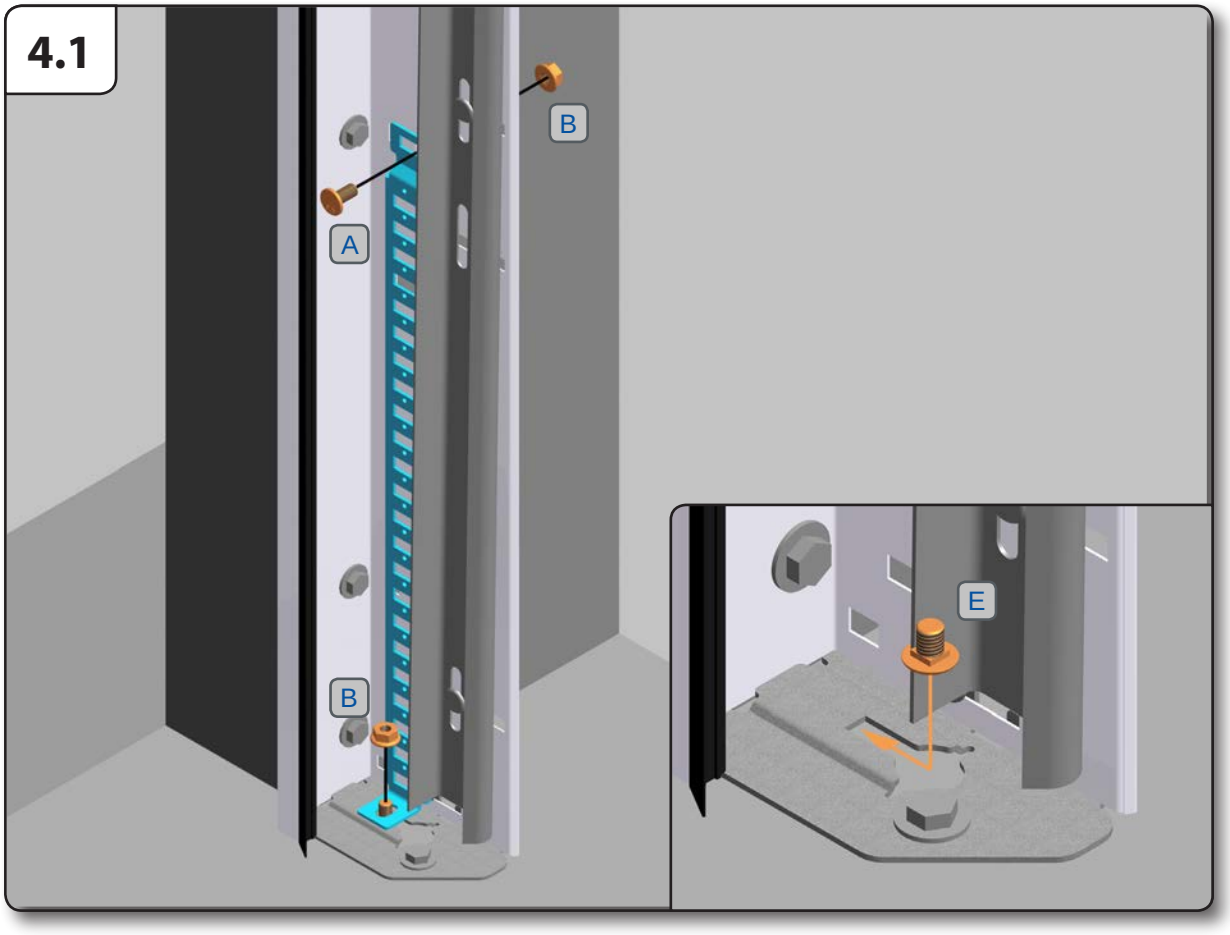
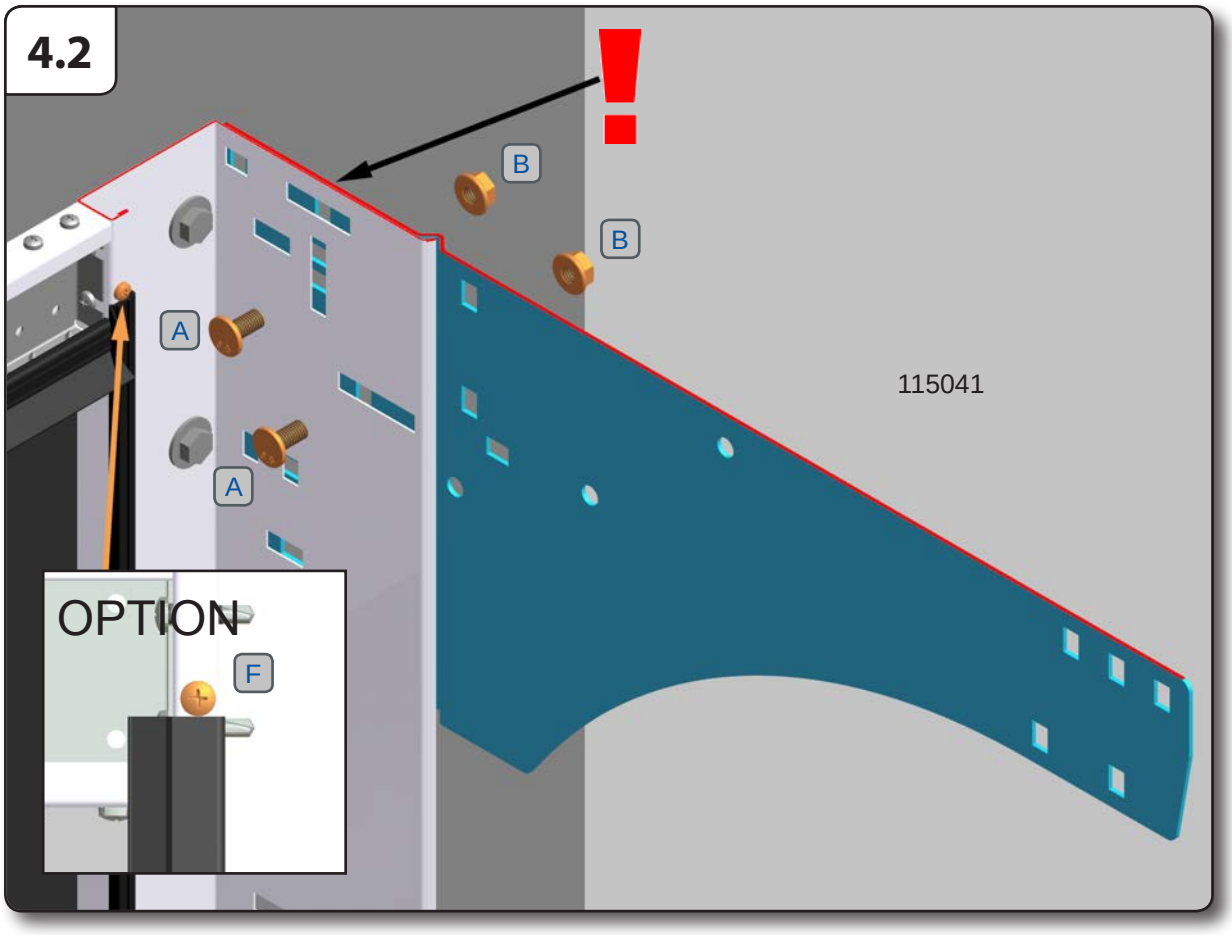

4
4.2 + 4.3
4.2 + 4.3
4.1
4.1


4.1
A
B
B
E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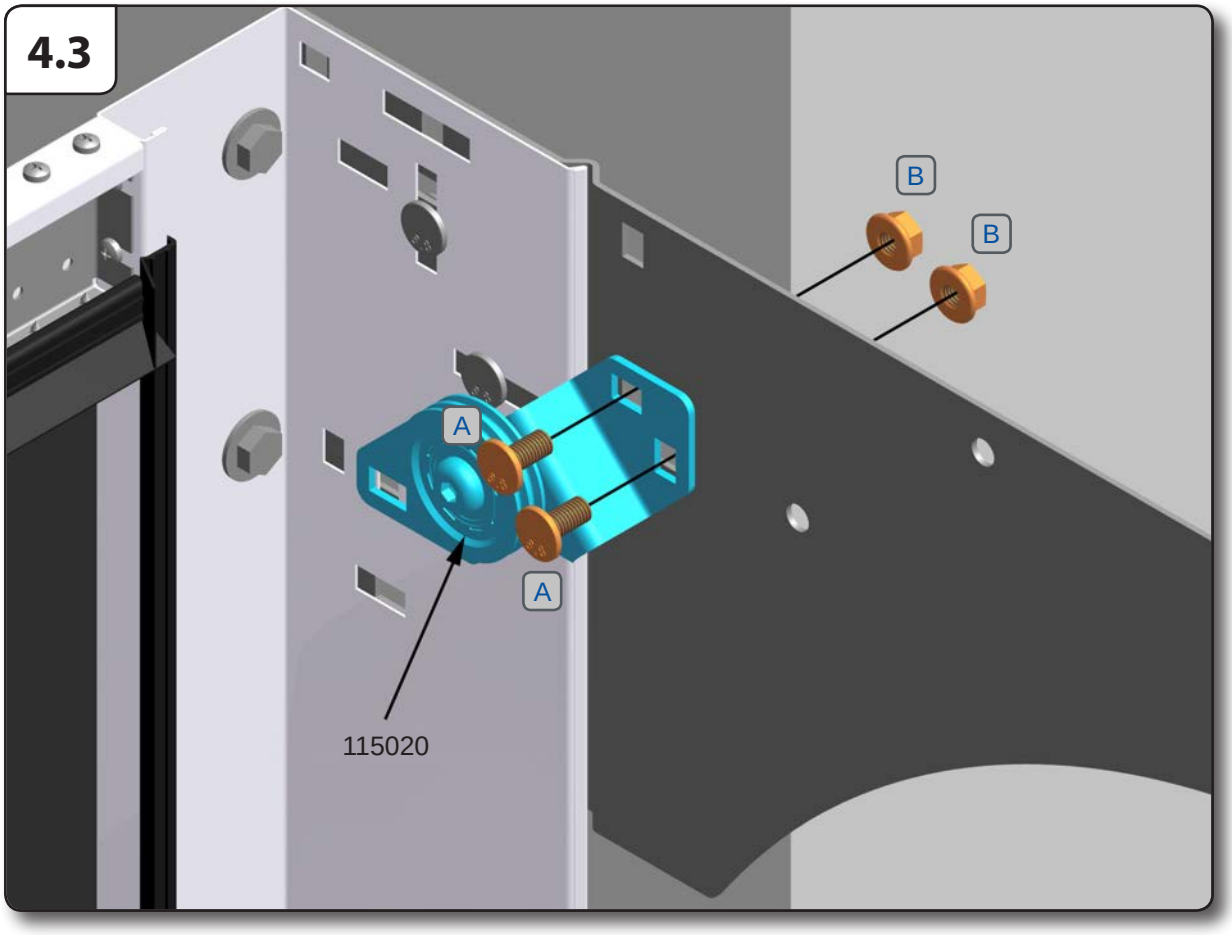
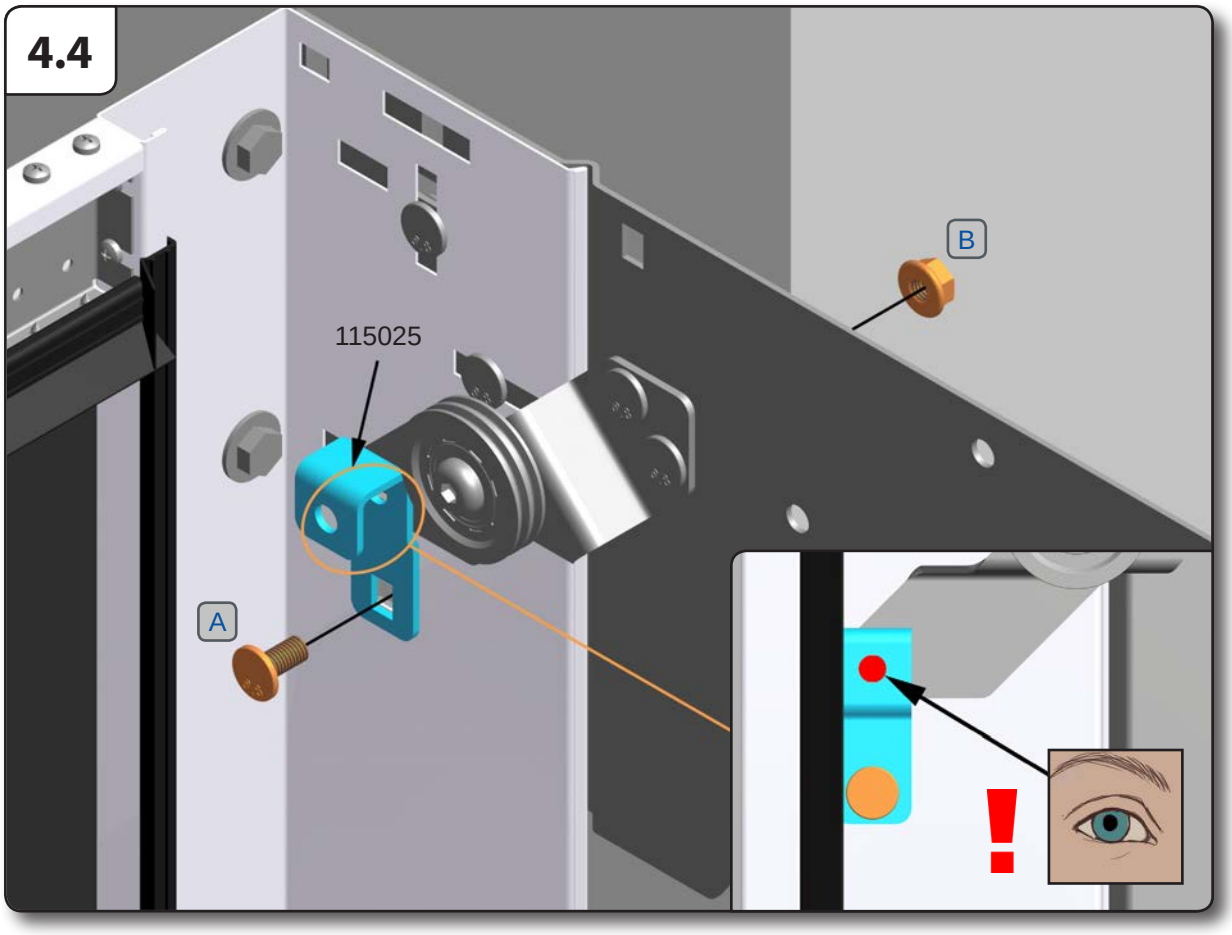
B
B
A
A
115041
OPTION
F


4.3
B
B
A
A
115020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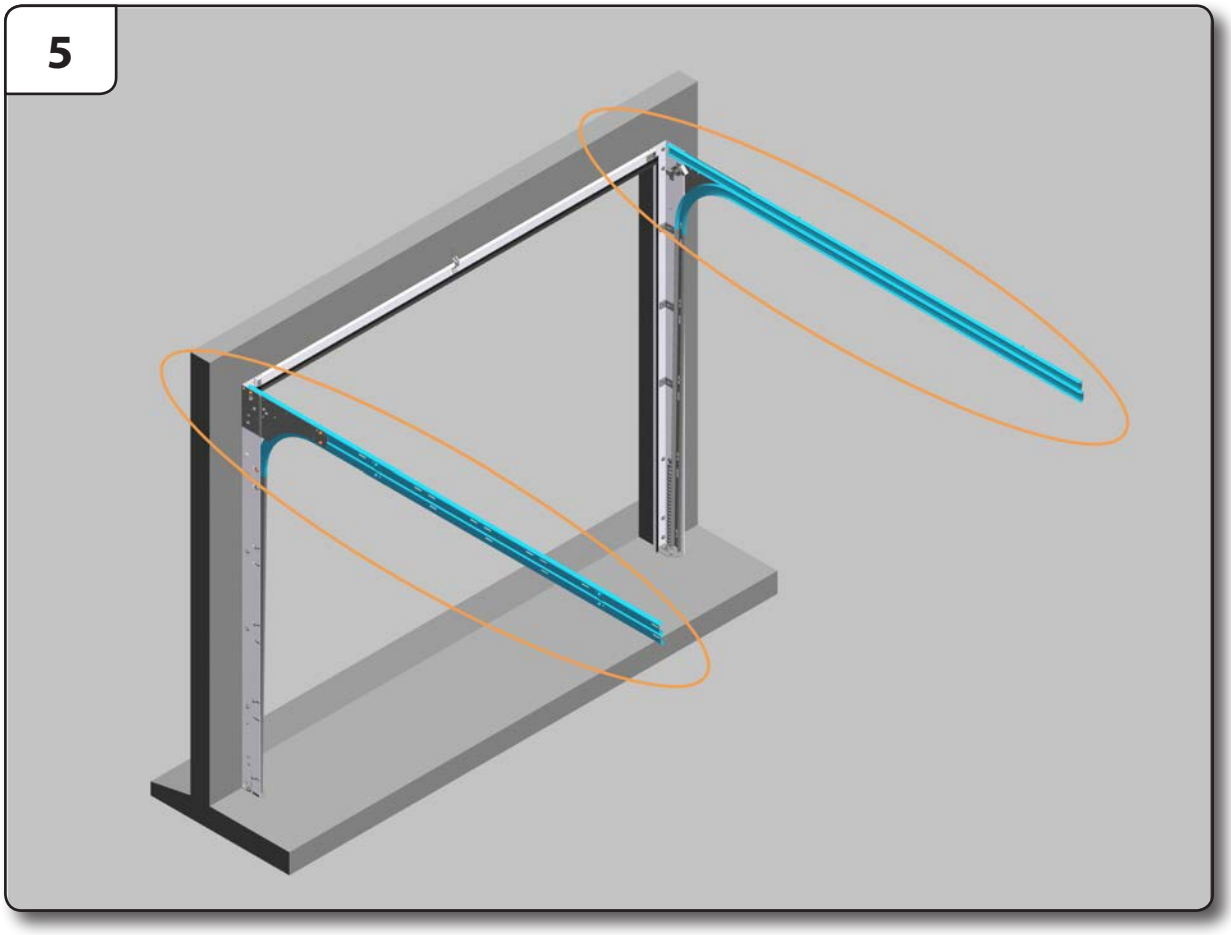
115025
B
A
!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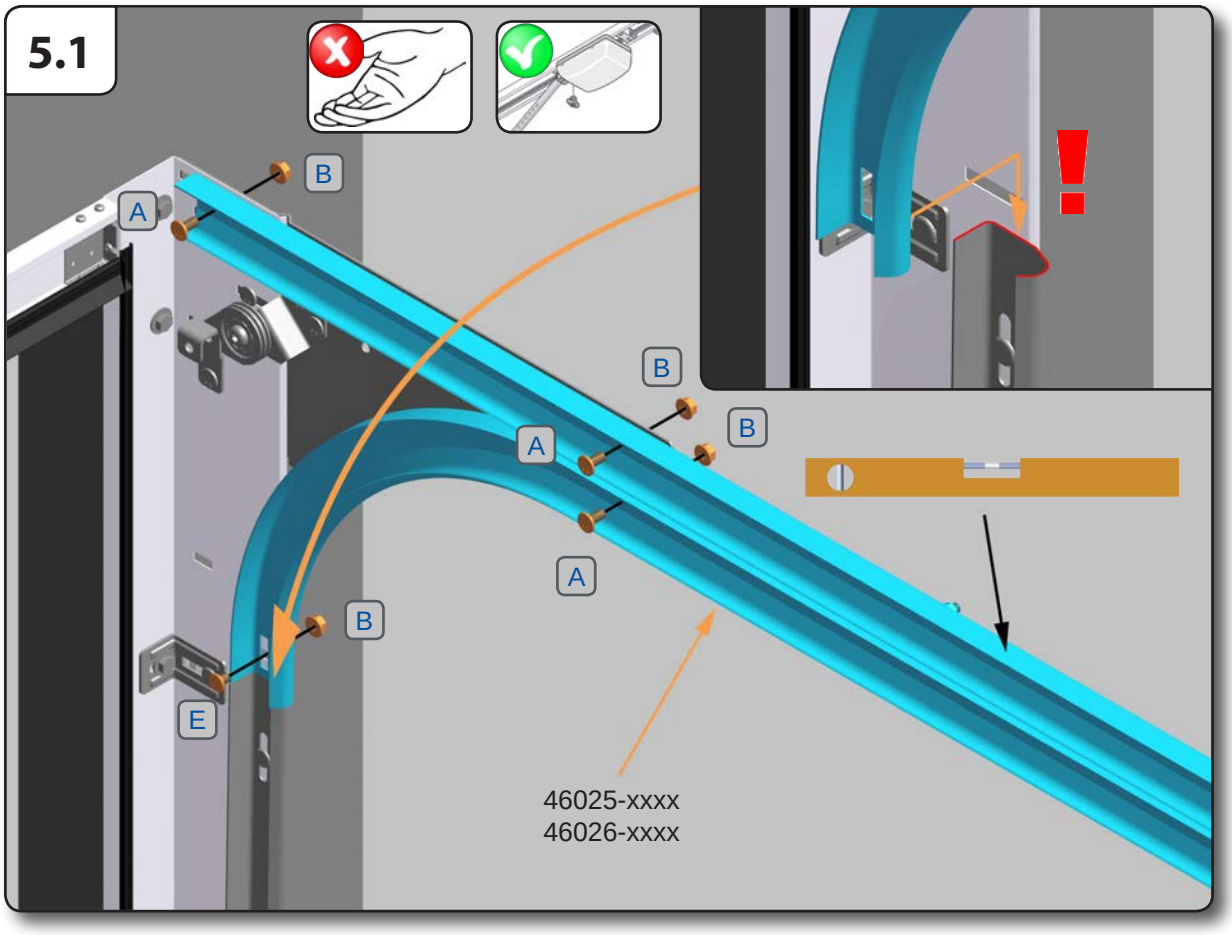
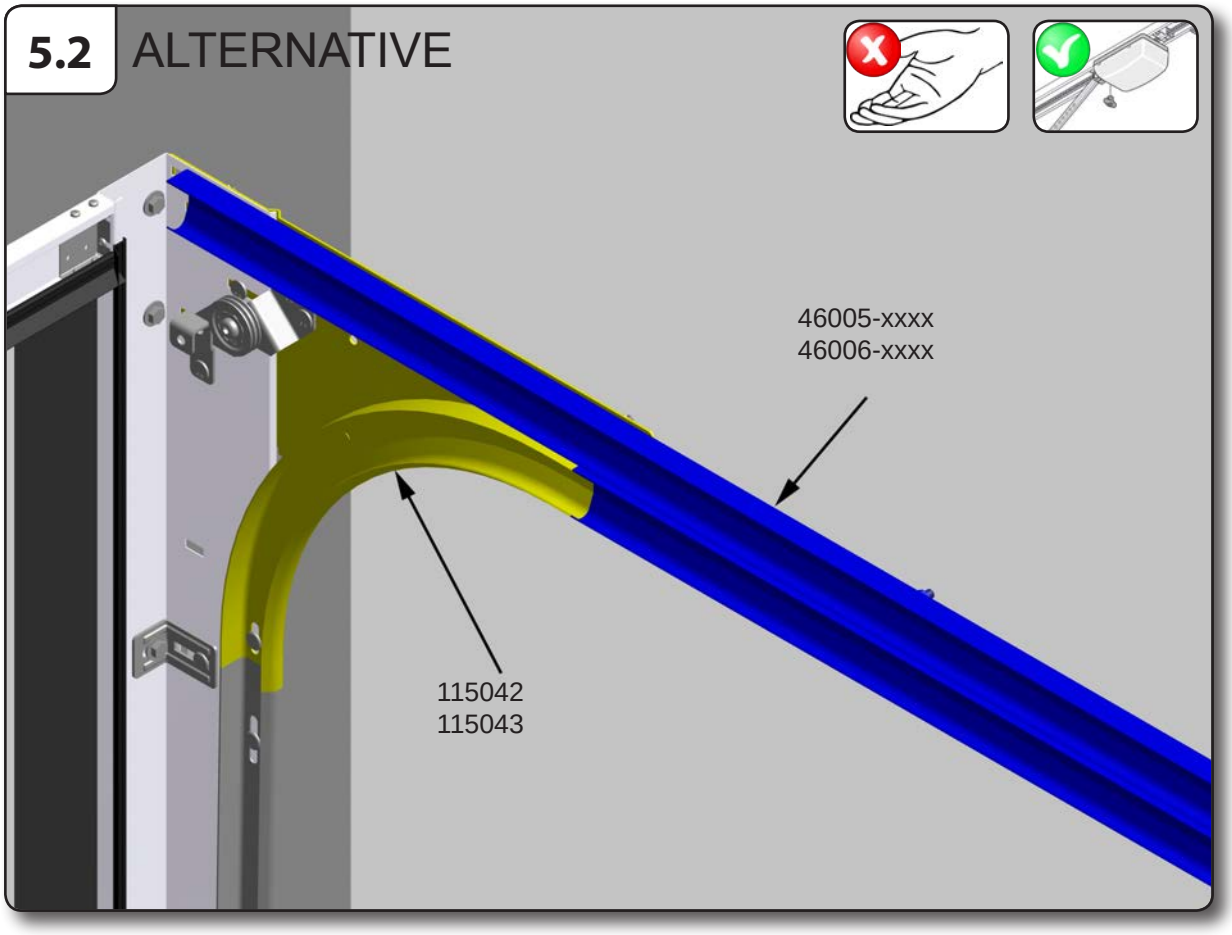
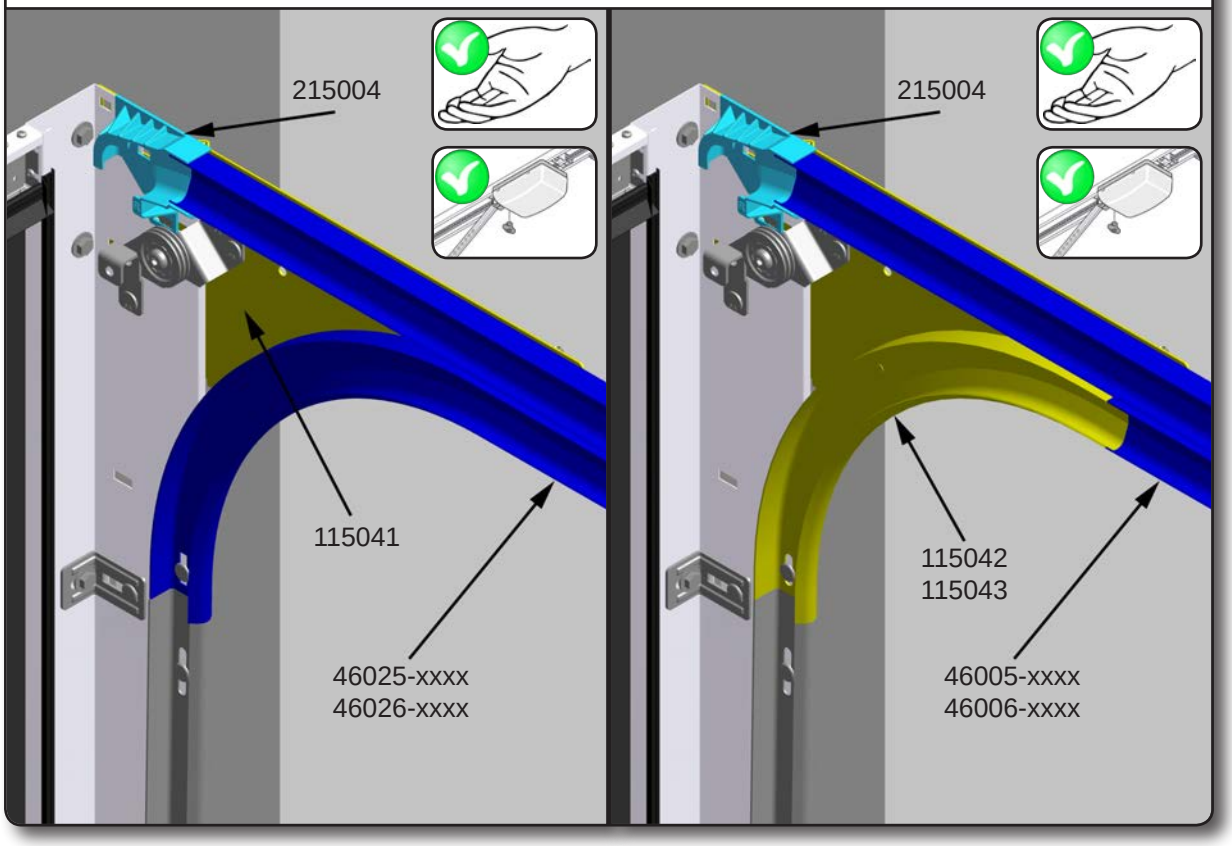
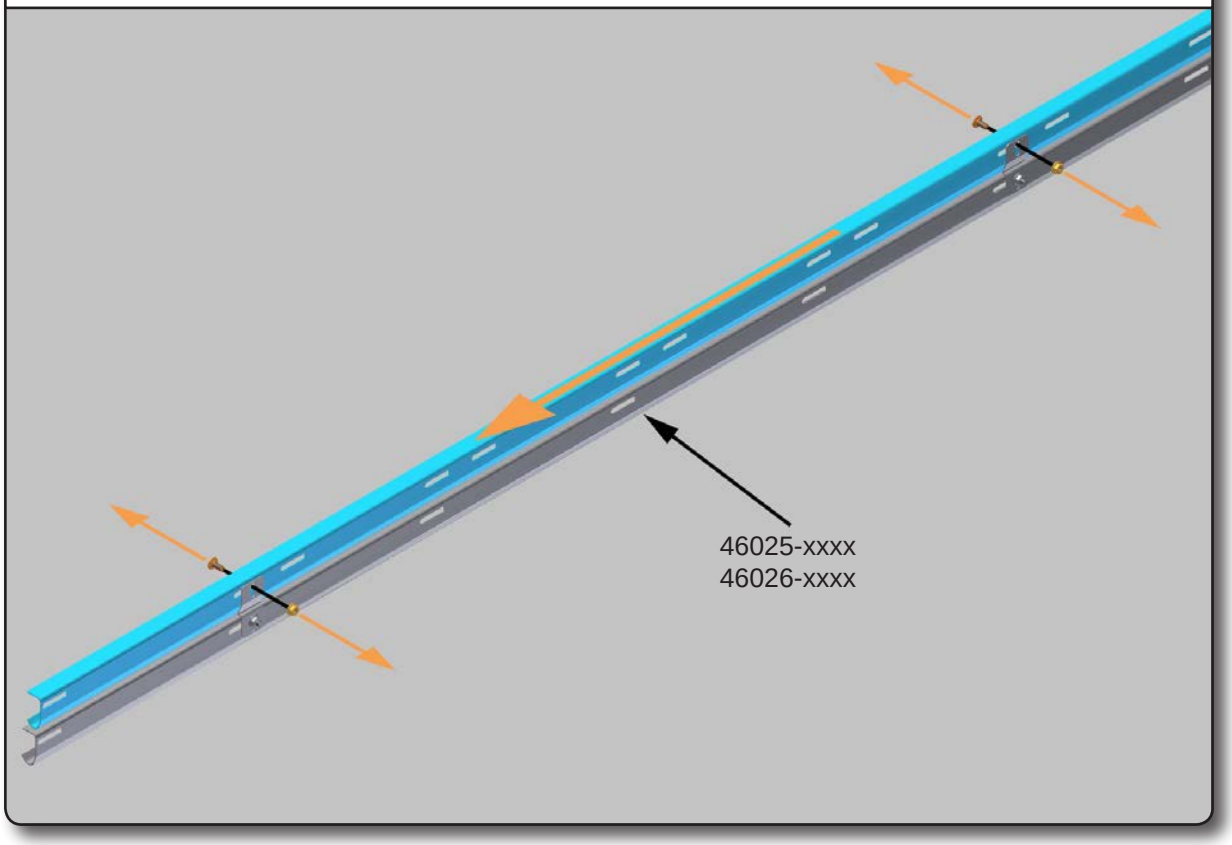

5.1
B
A
B
B
A
A
B
E
46025-xxxx
46026-xxxx


5.2 ALTERNATIVE
46005-xxxx
46006-xxxx
115042
115043

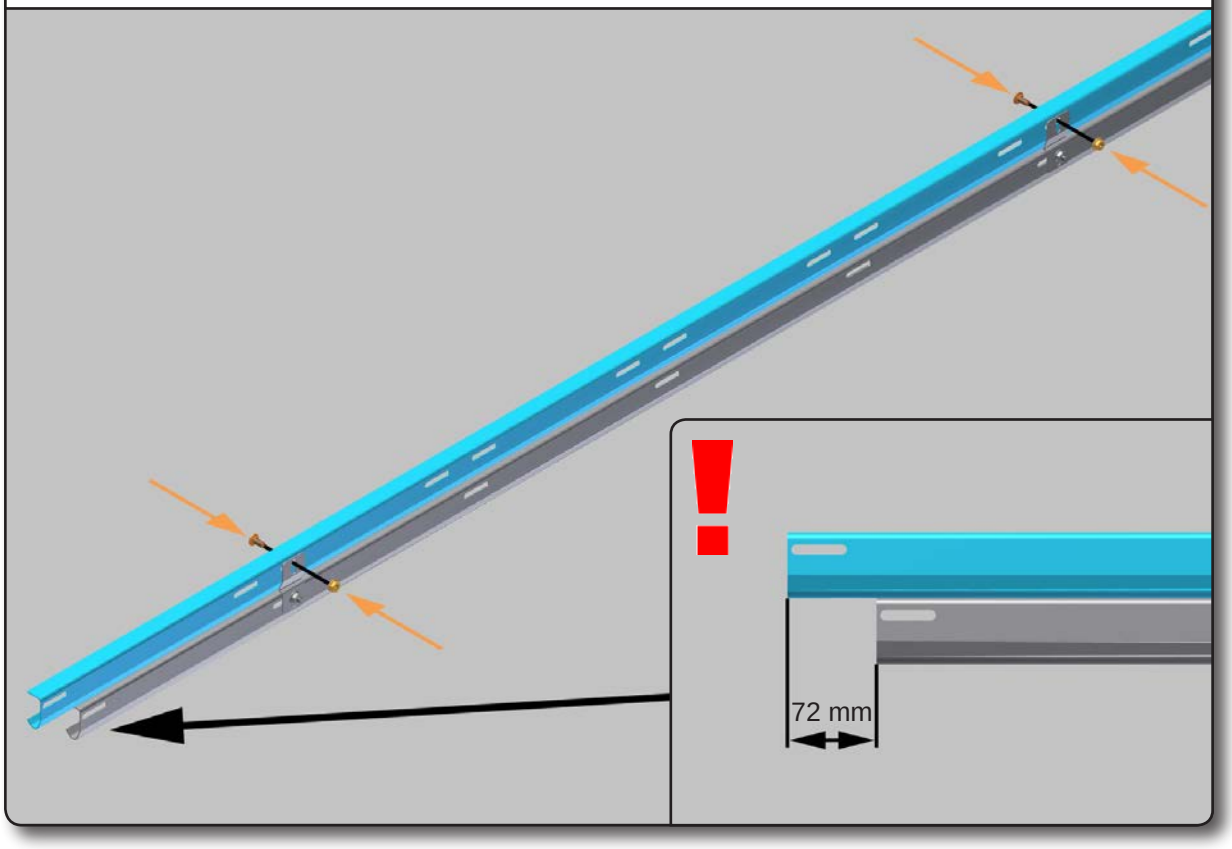
TOP CURVE ALTERNATIVE

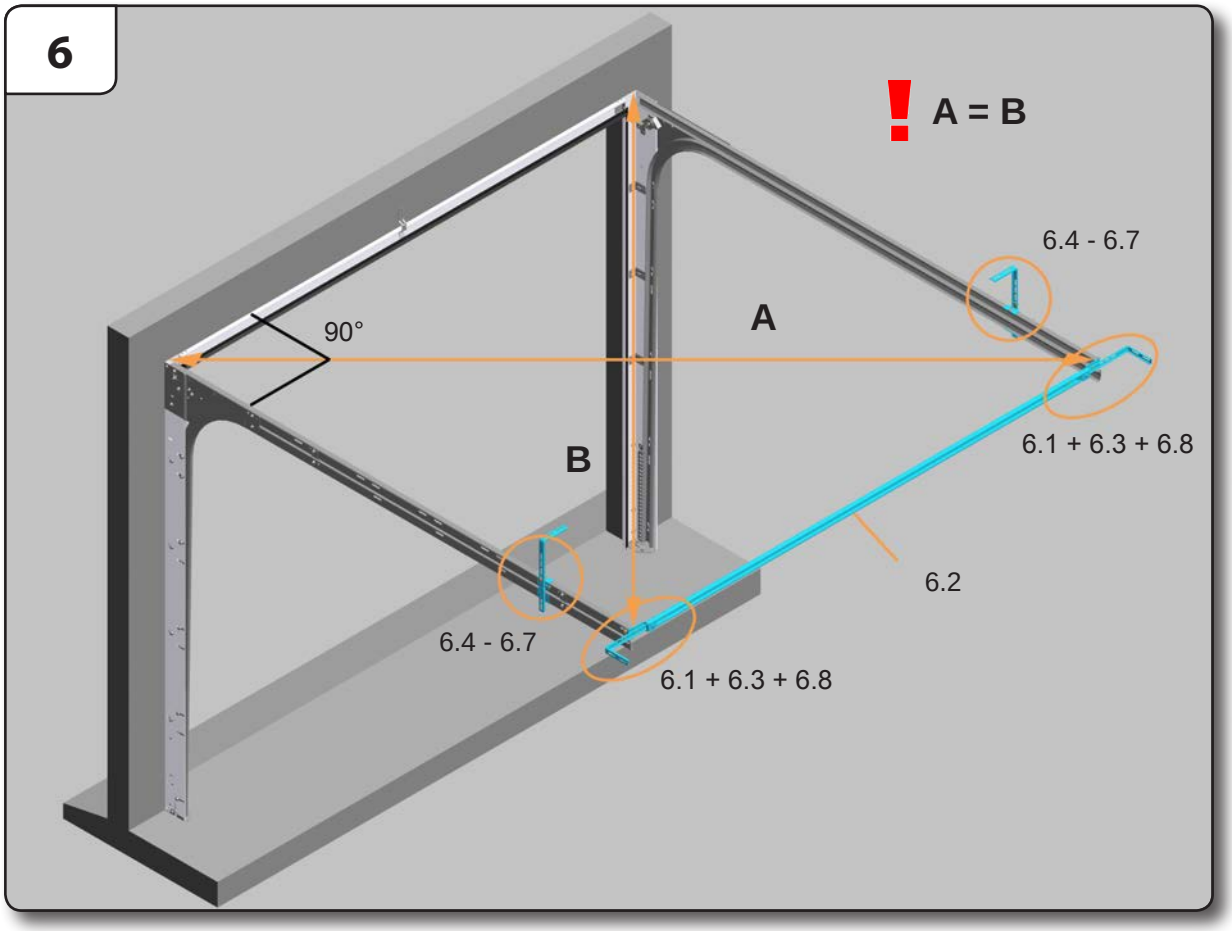


MODIFICATION FOR TOP CURVE

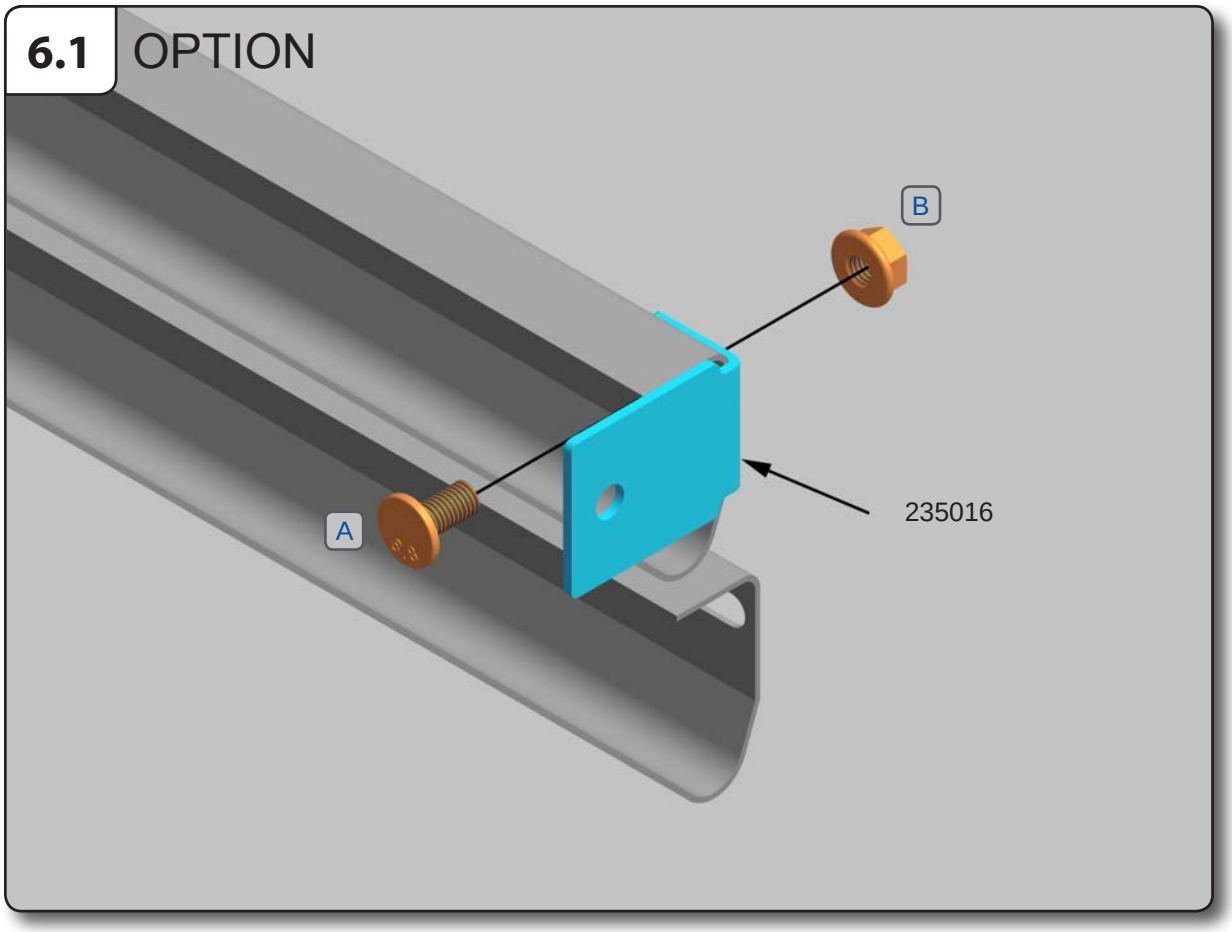


MODIFICATION FOR TOP CURVE





6.1 OPTION



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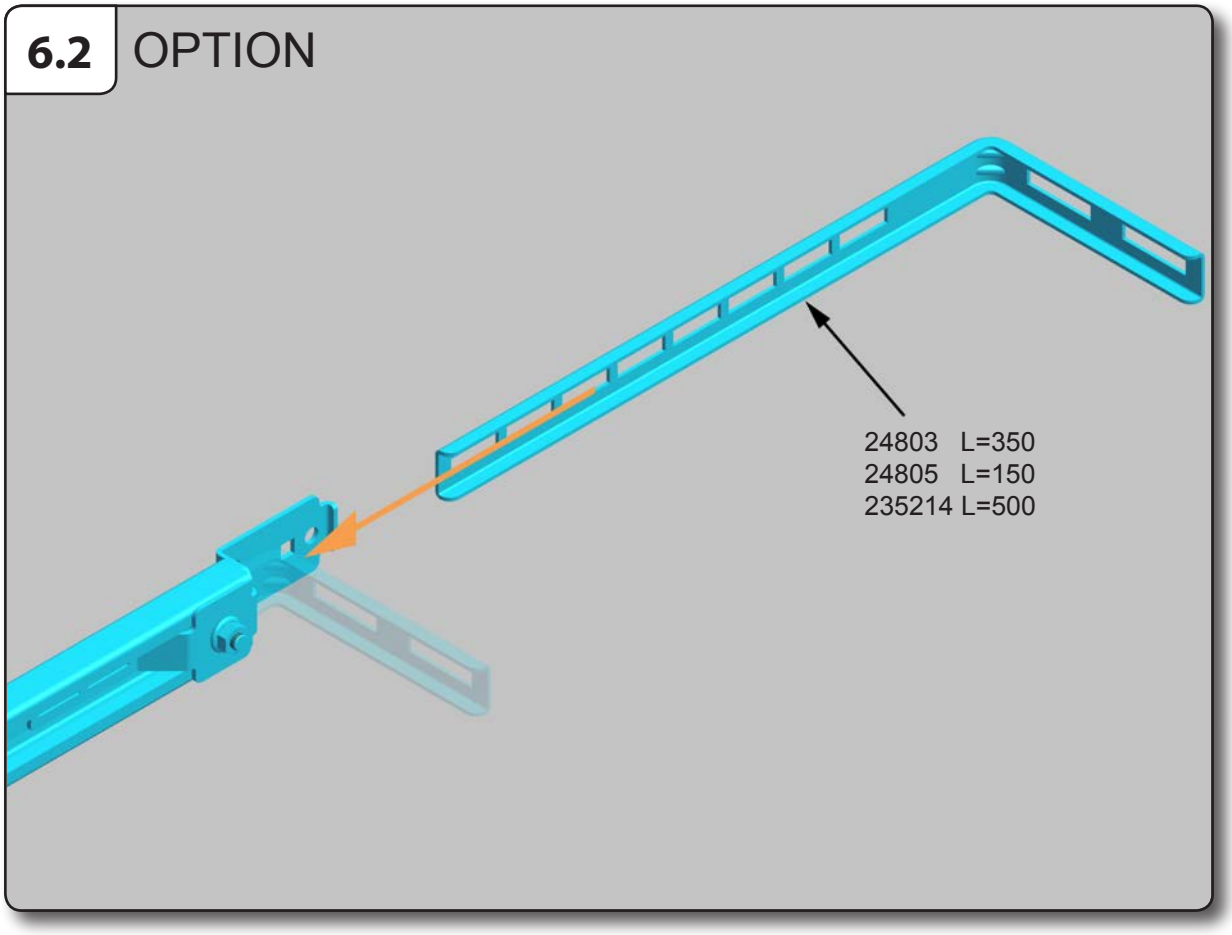

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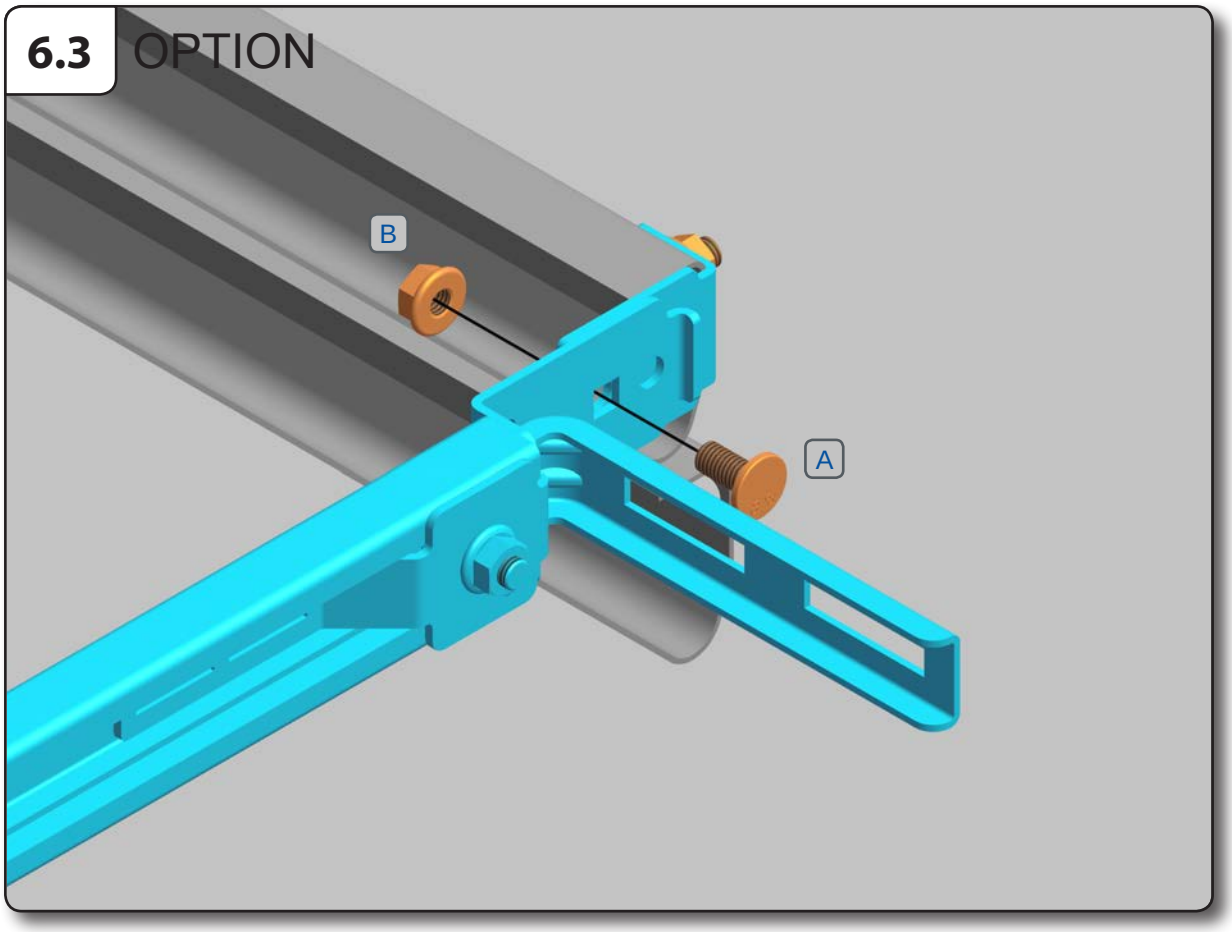

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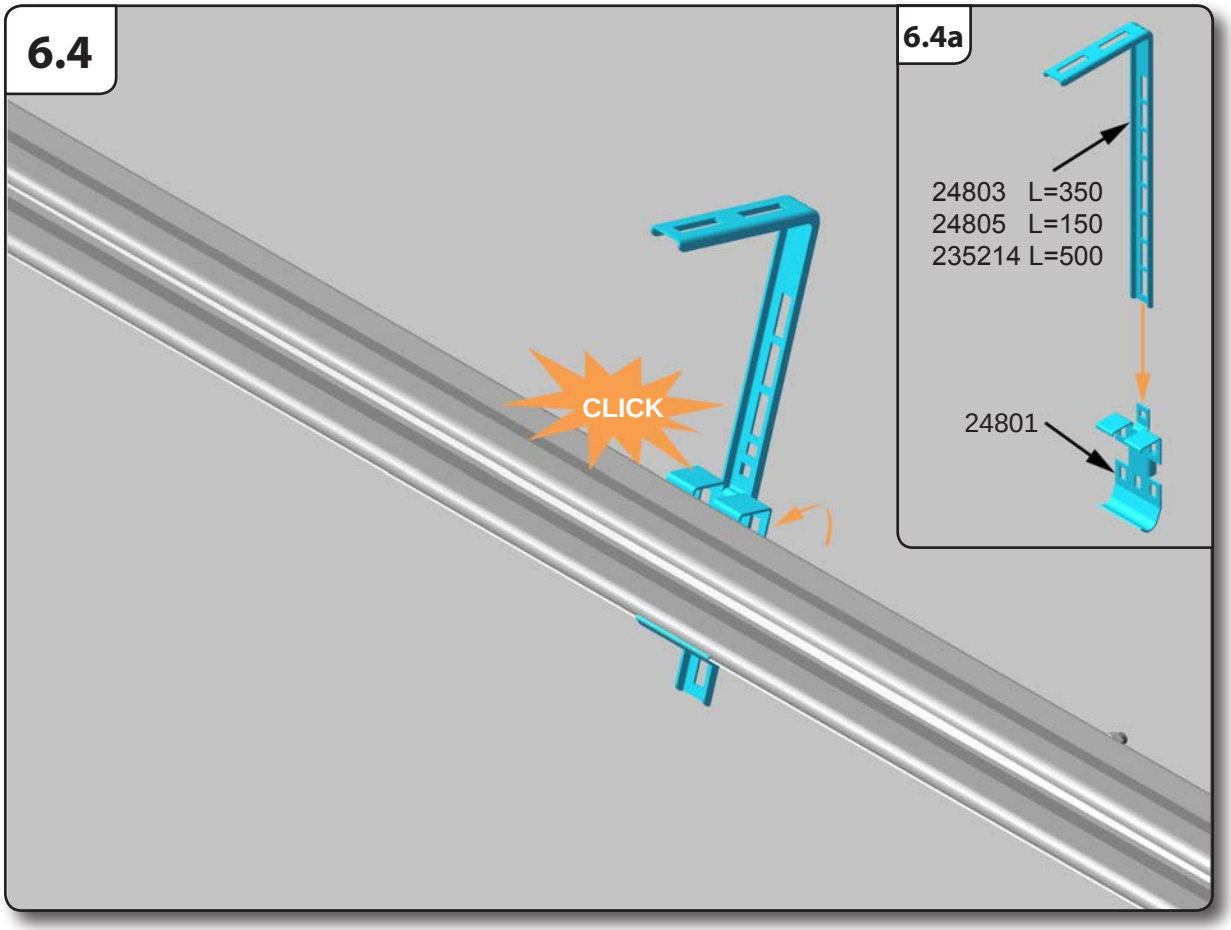
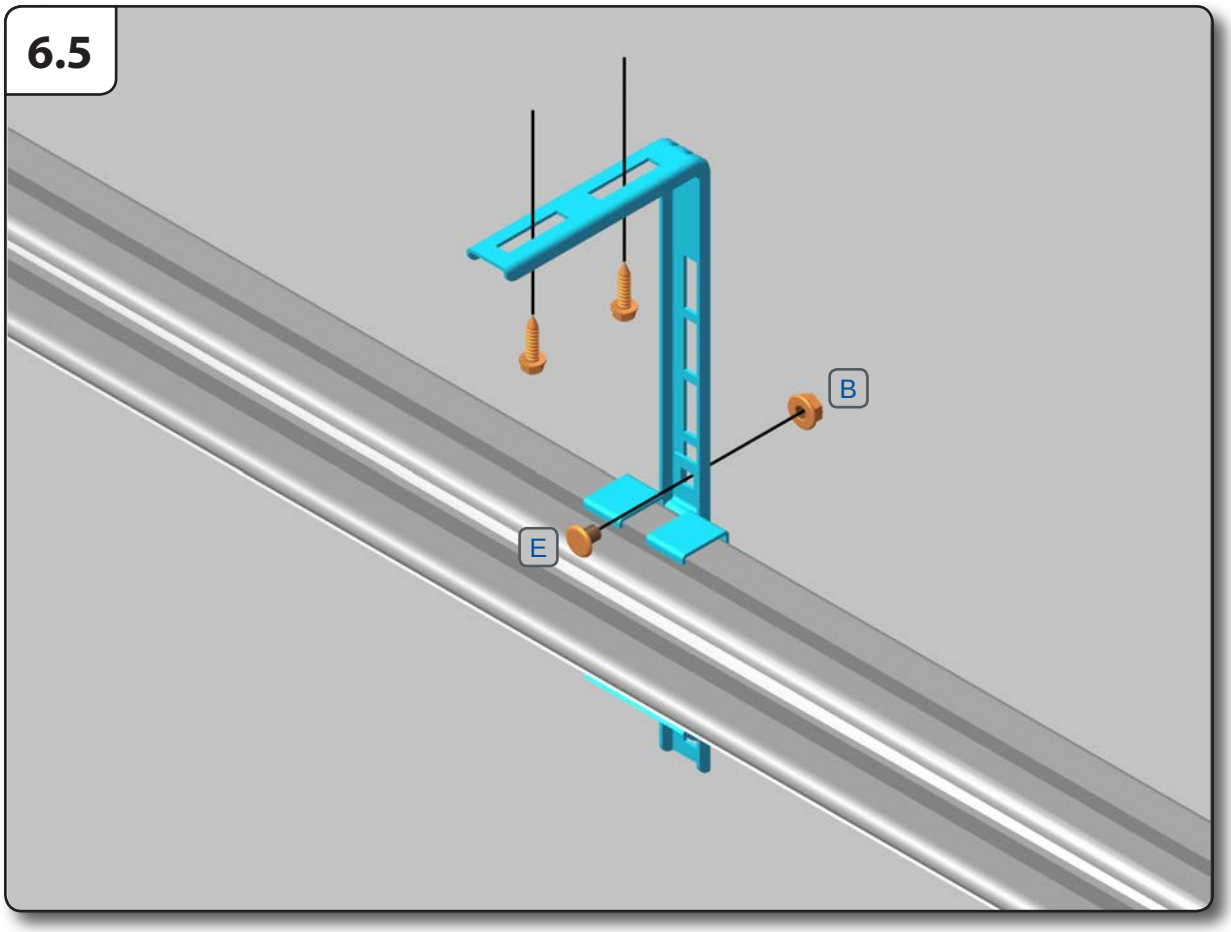


6.4a

6.5



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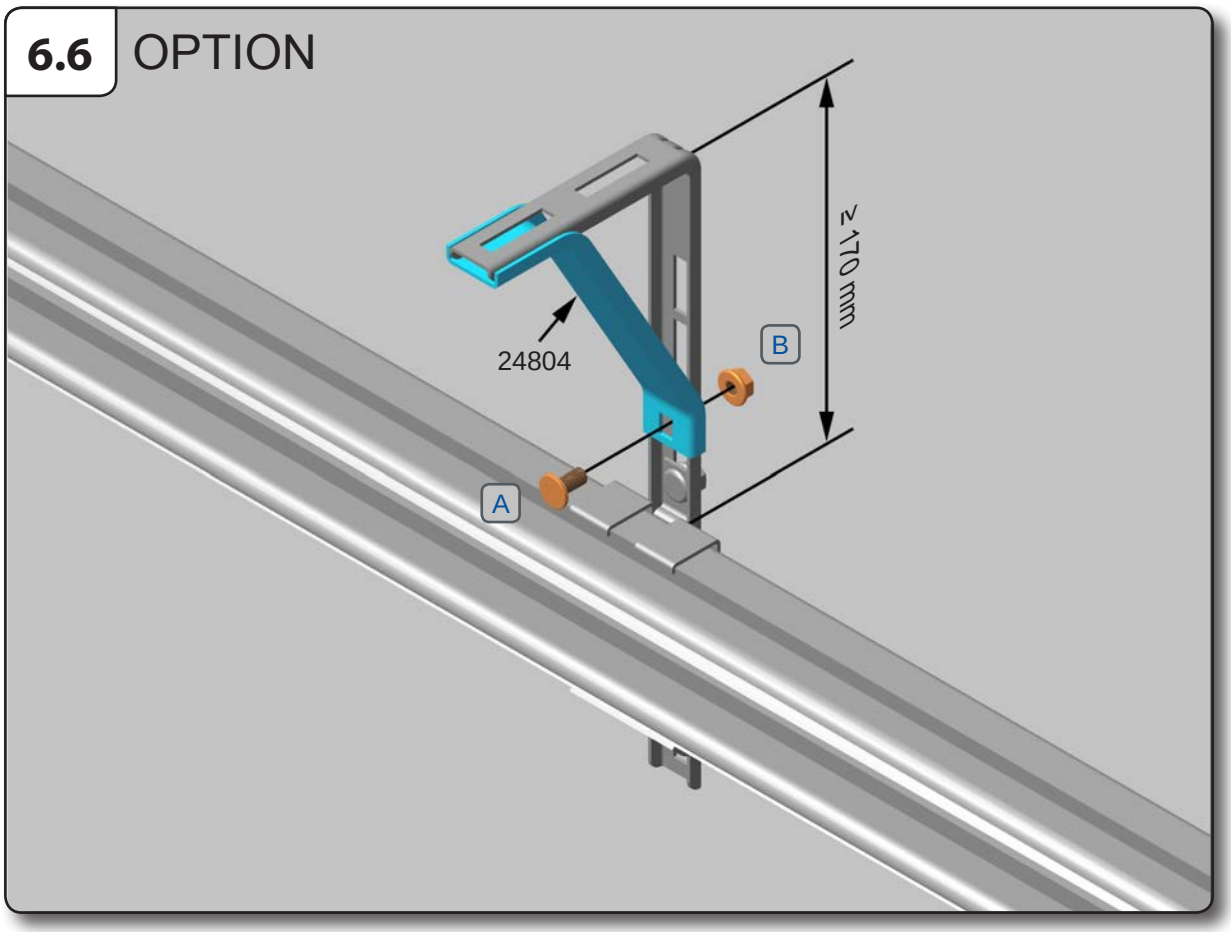
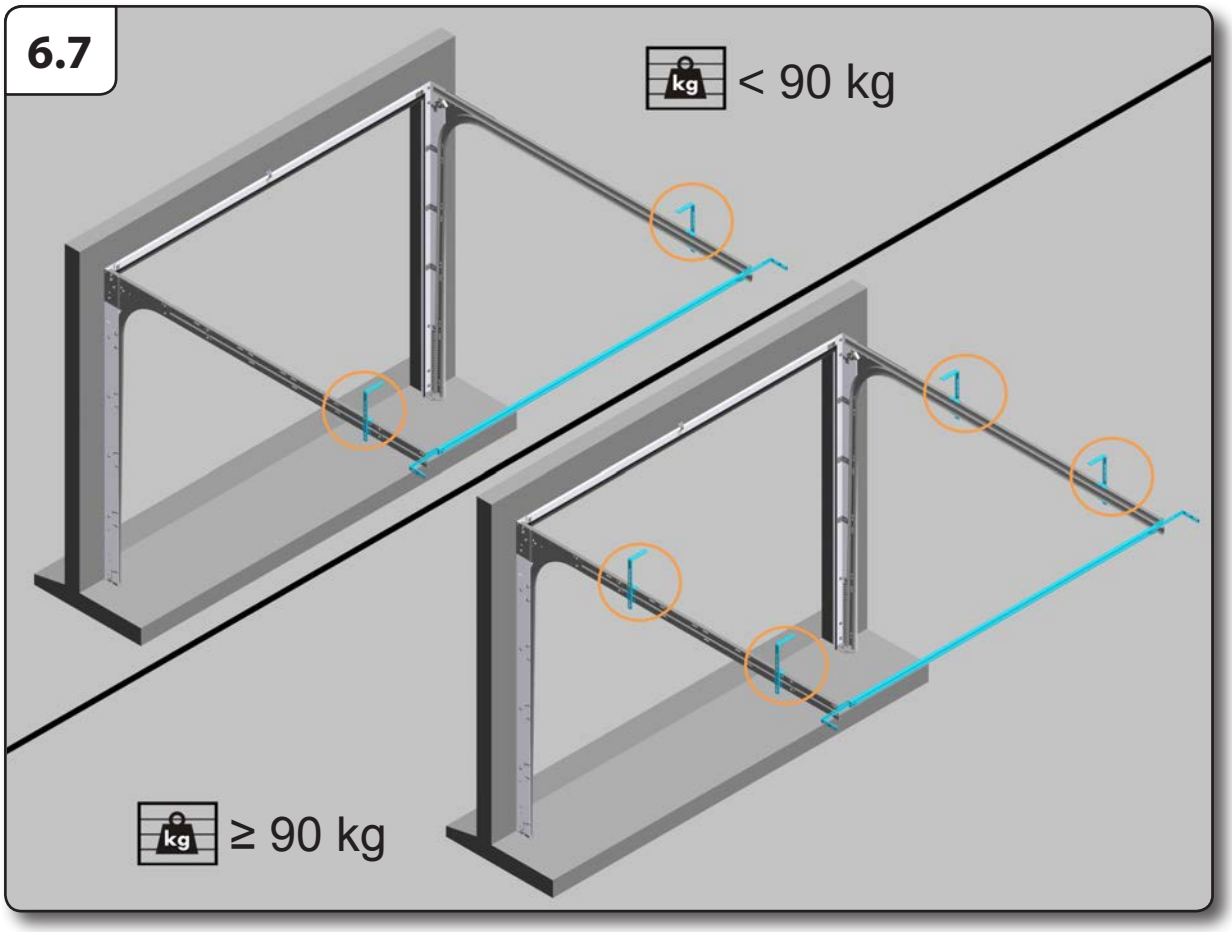
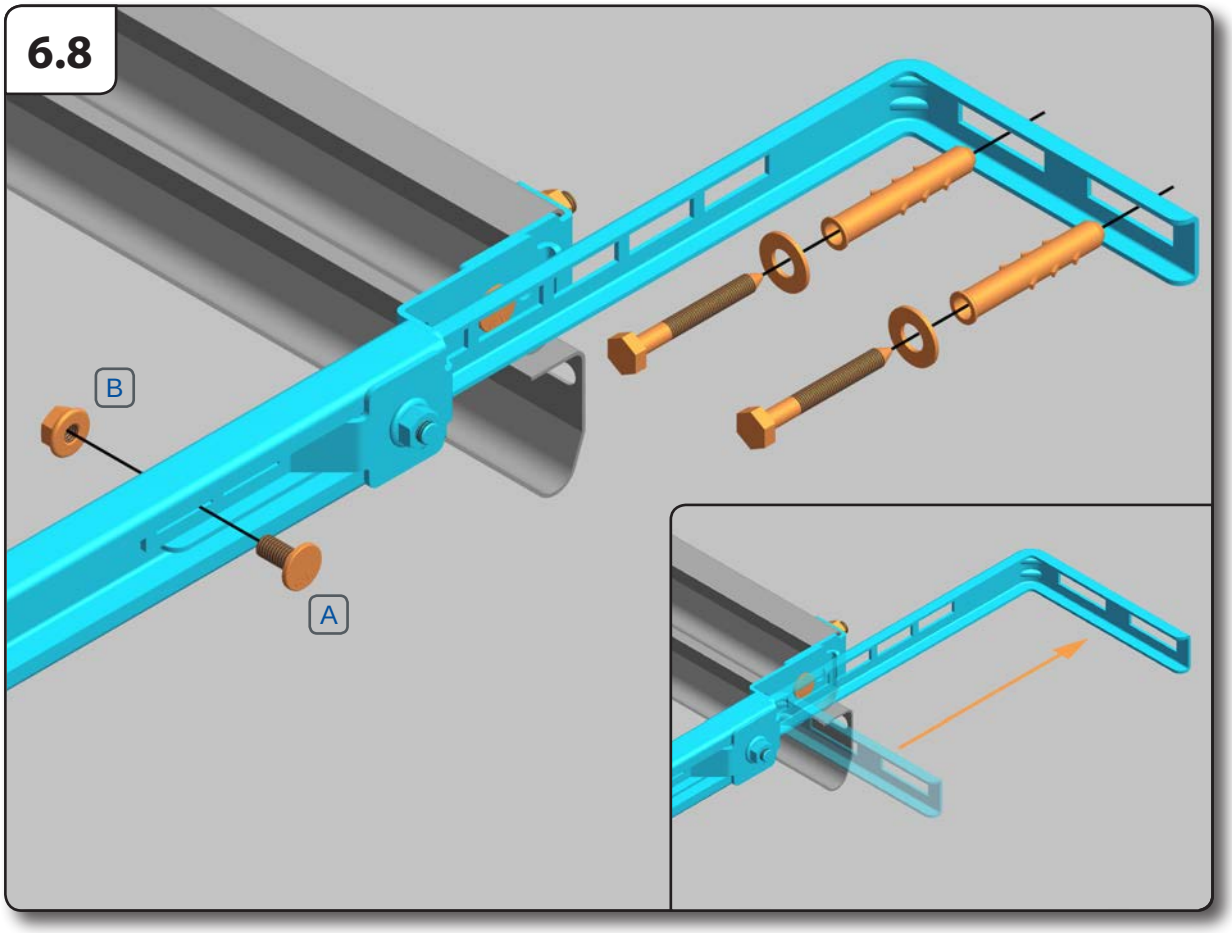
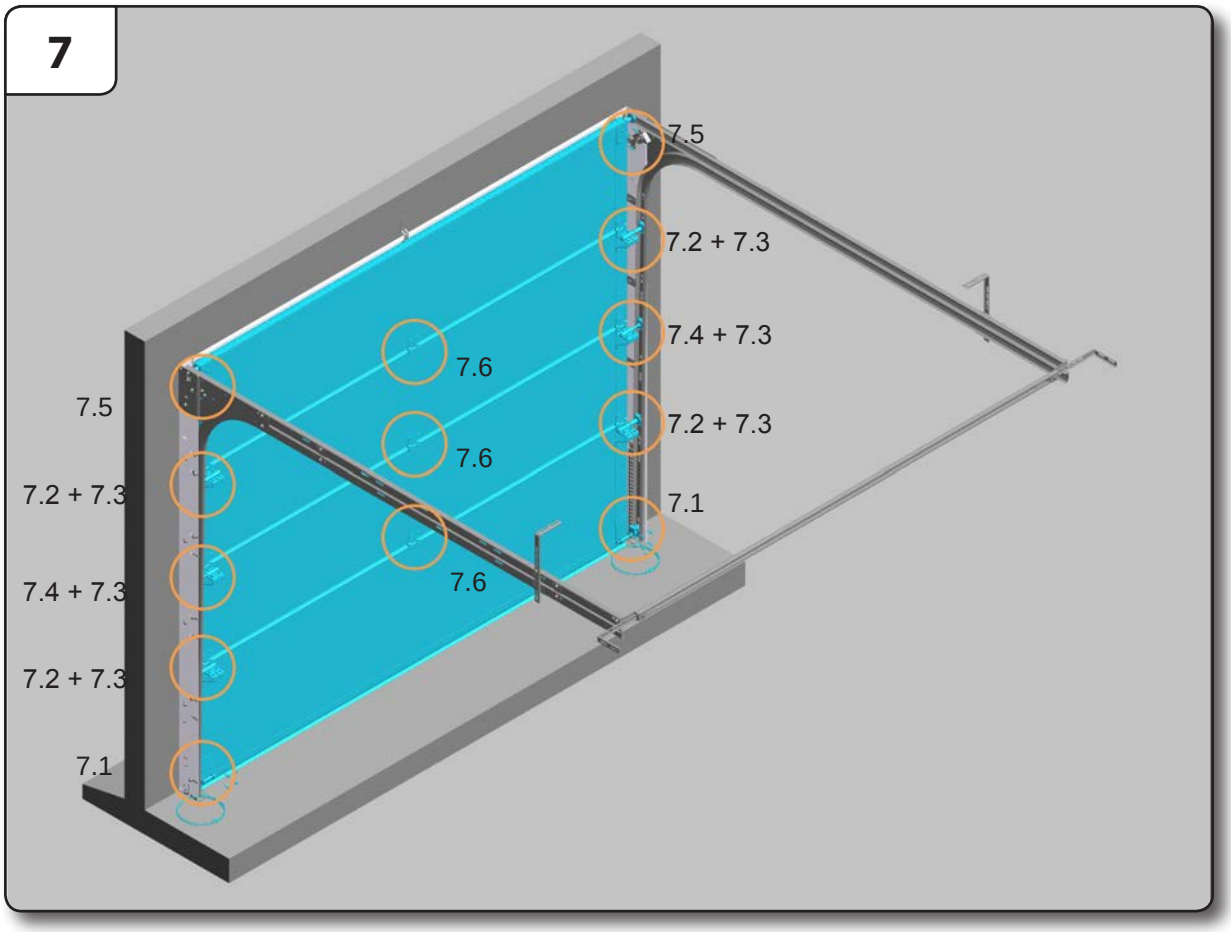
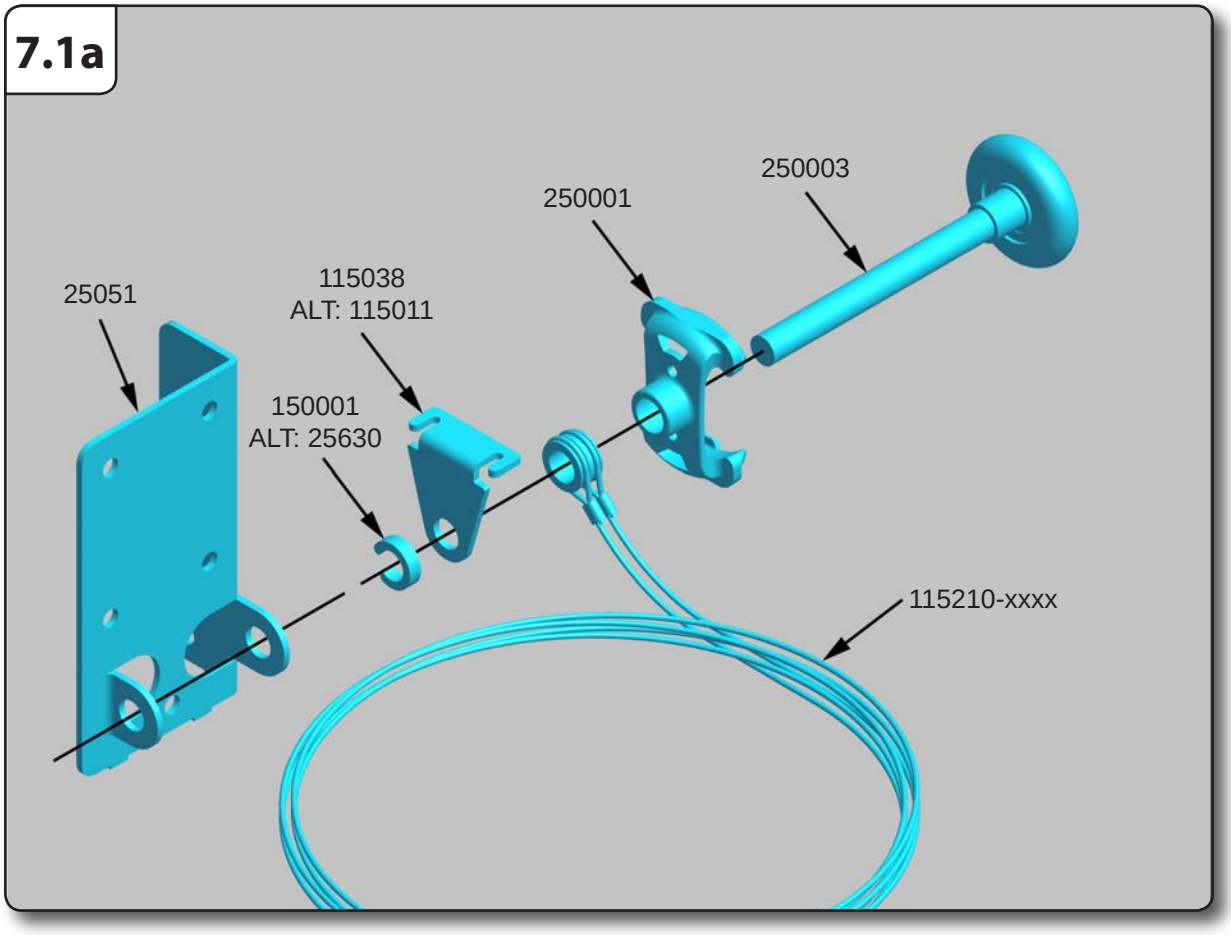
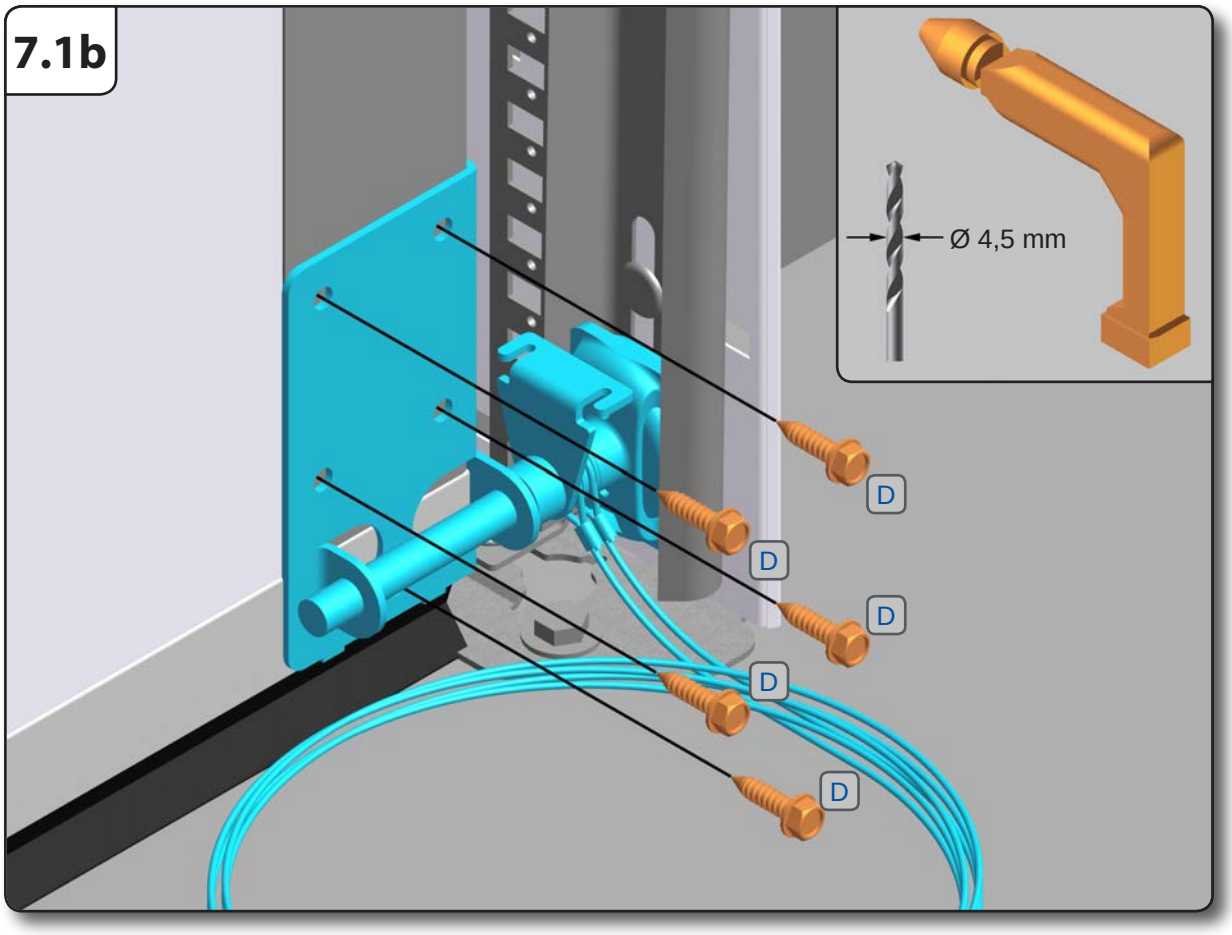


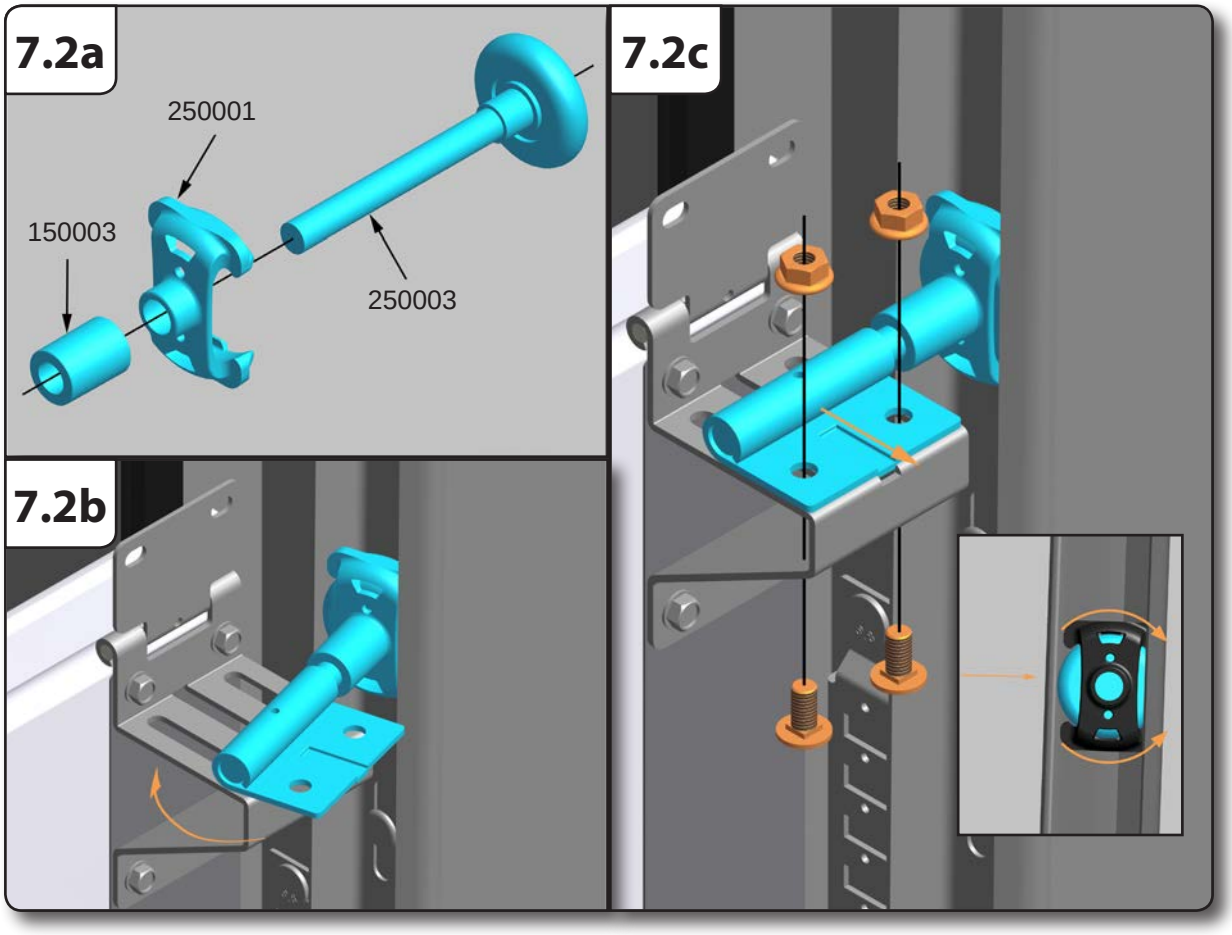

6.7
< 90 kg
1
1
1
1
≥ 90 kg

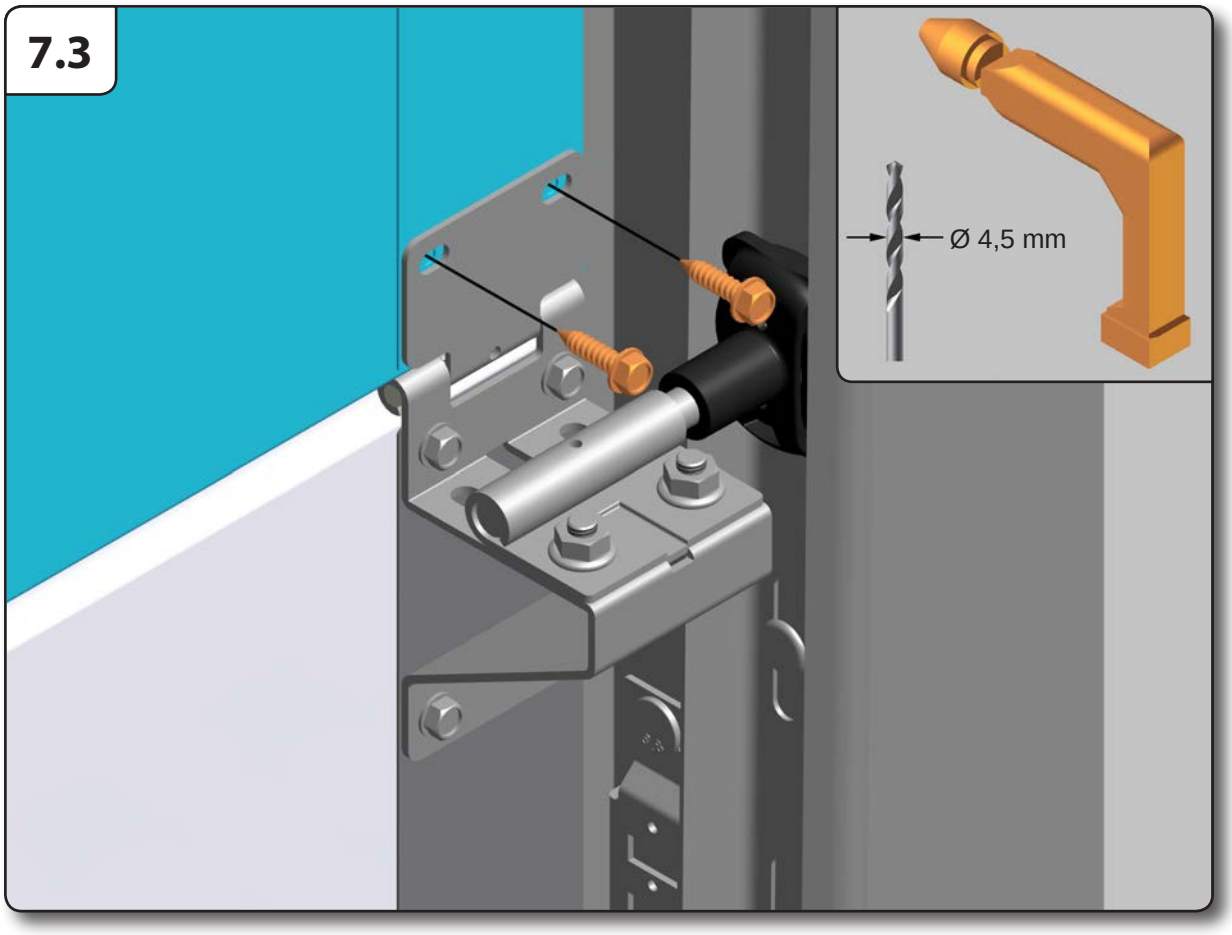

6.8
B
A

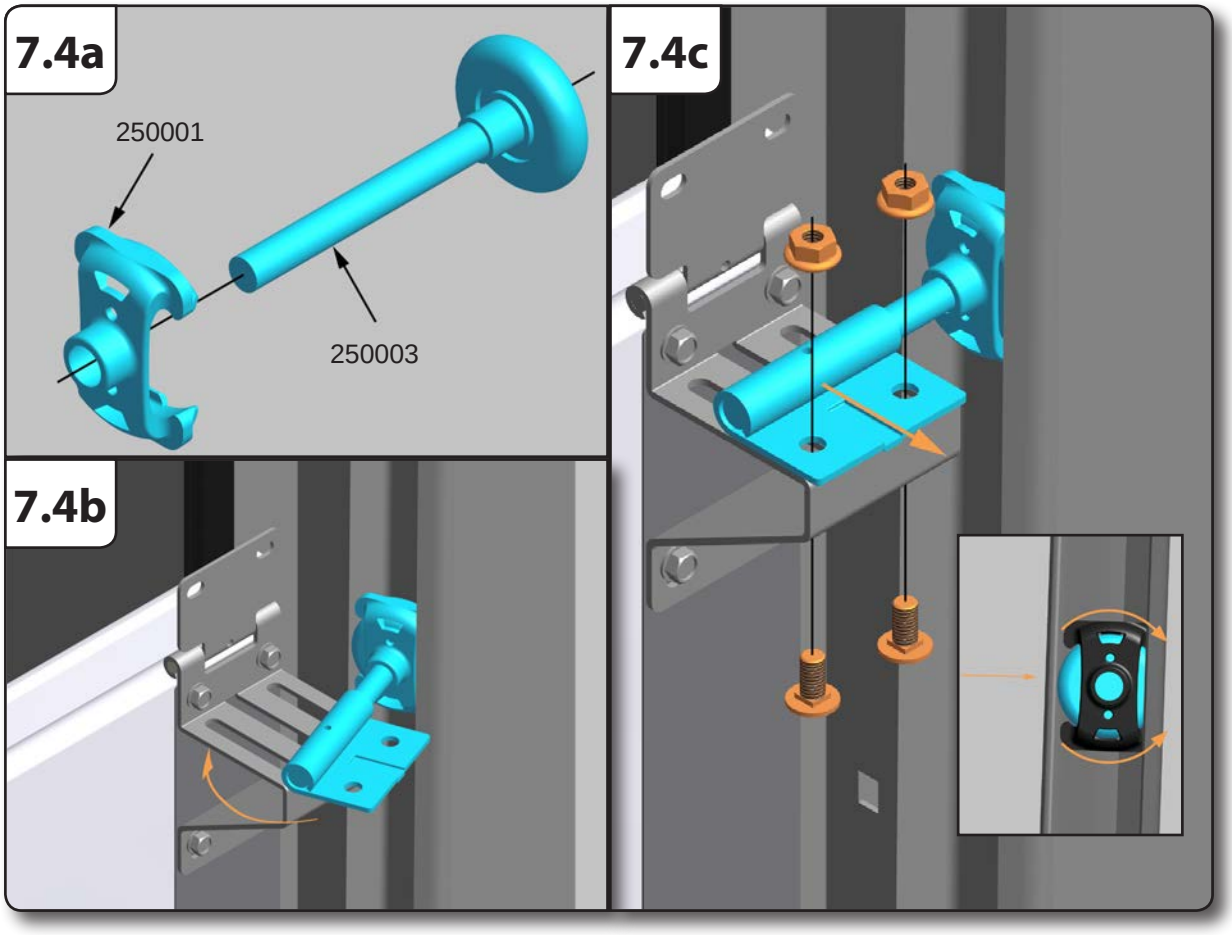

7
7.5
7.2 + 7.3
7.4 + 7.3
7.2 + 7.3
7.1
7.6
7.6
7.6
7.5
7.2 + 7.3
7.4 + 7.3
7.2 + 7.3
7.1

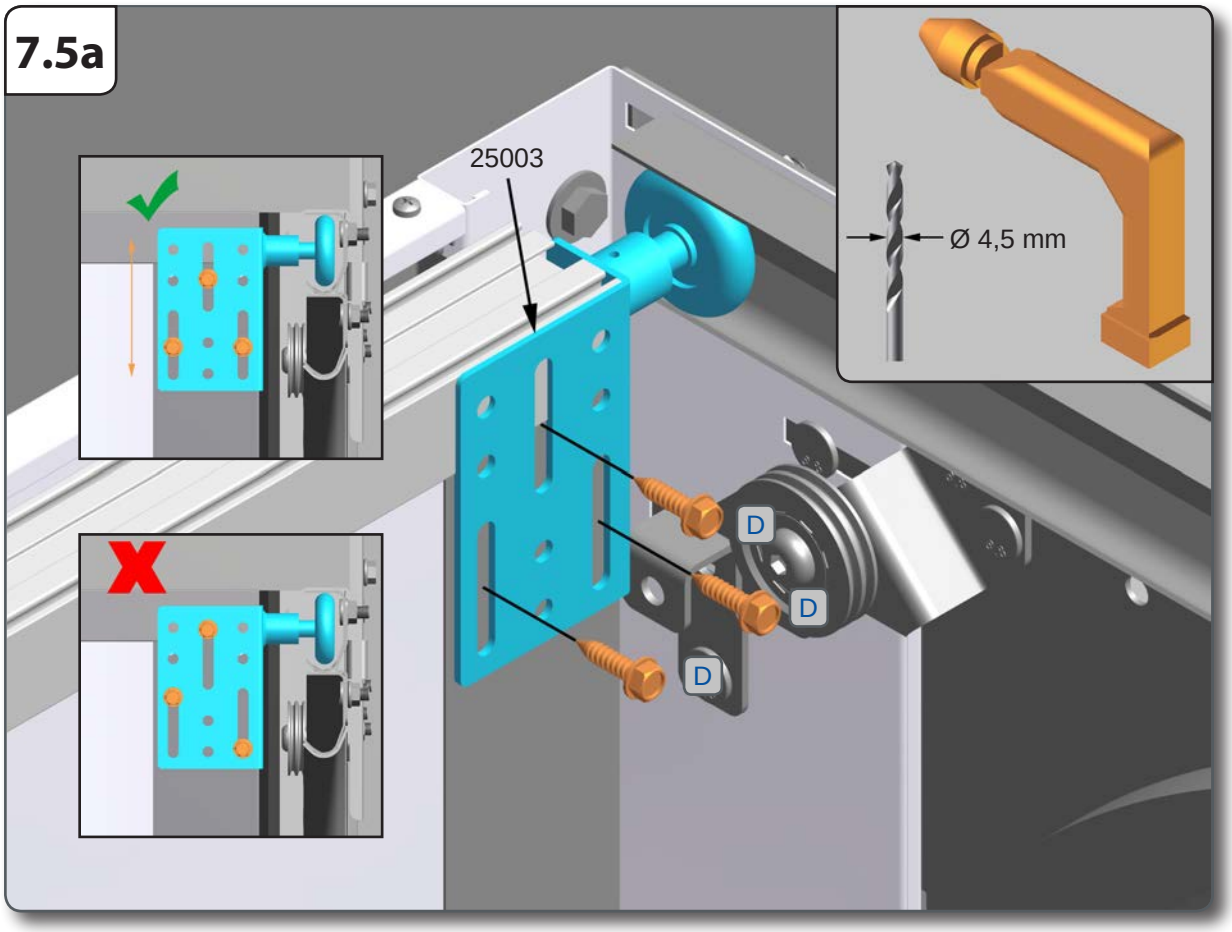

7.1a
250003
250001
25051
115038
ALT: 115011
150001
ALT: 25630
115210-xxxx

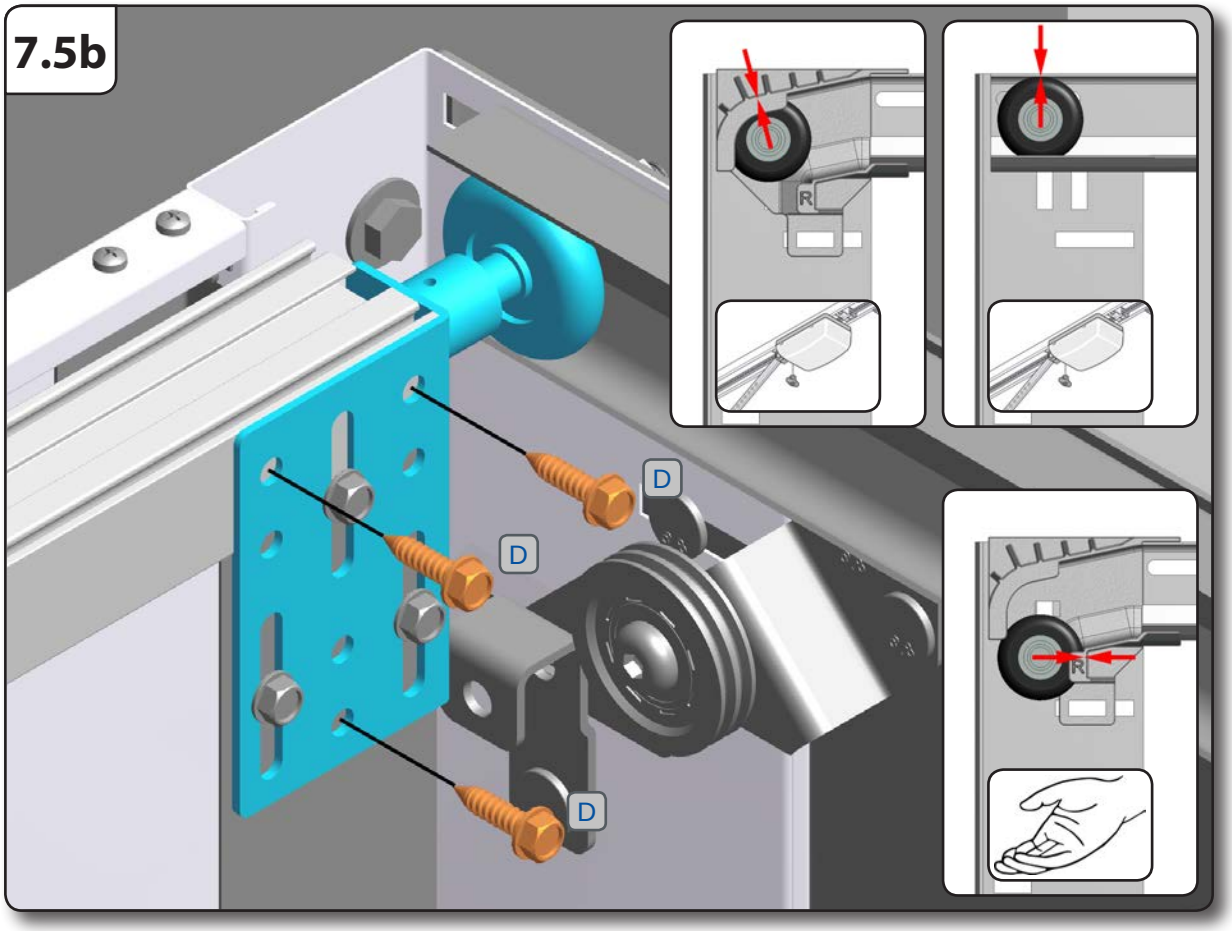

7.1b
Ø 4,5 mm
D
D
D
D
D

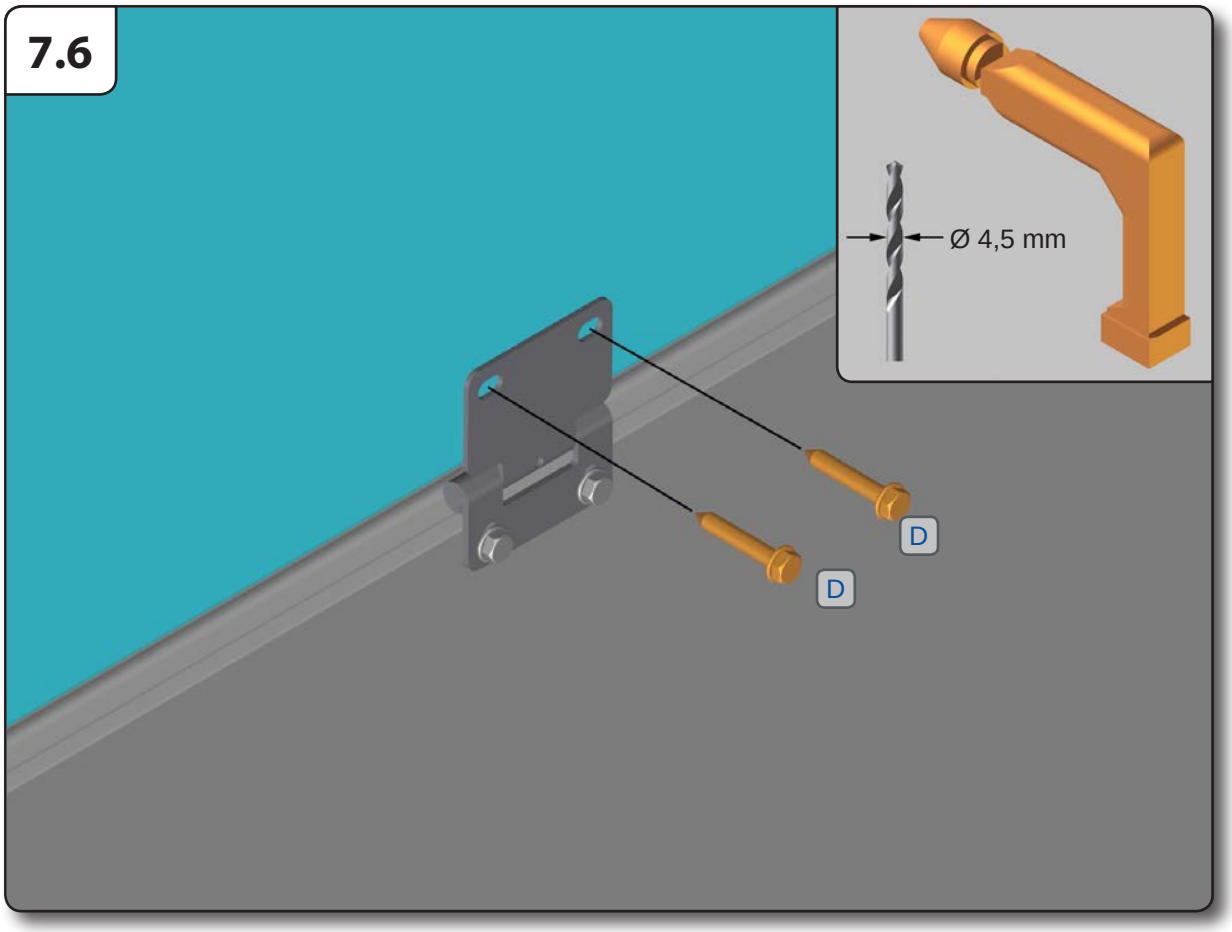

7.2a
250001
150003
250003
7.2b
7.2c

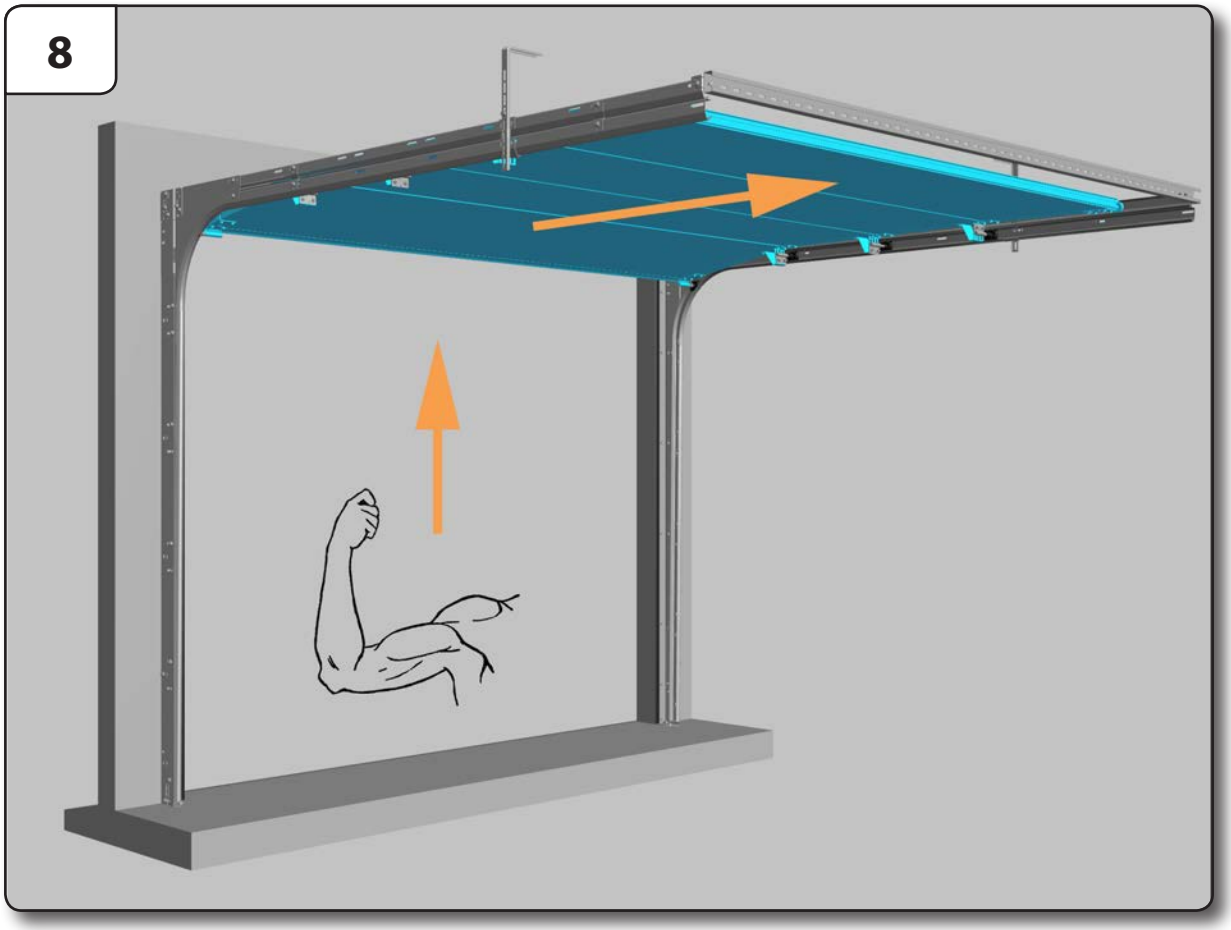

7.3
Ø 4,5 mm


7.4a
250001
250003
7.4b
7.4c


7.5a
25003
Ø 4,5 mm
D
D
D


7.5b
R
D
D
D
R


7.6
Ø 4,5 mm
D
D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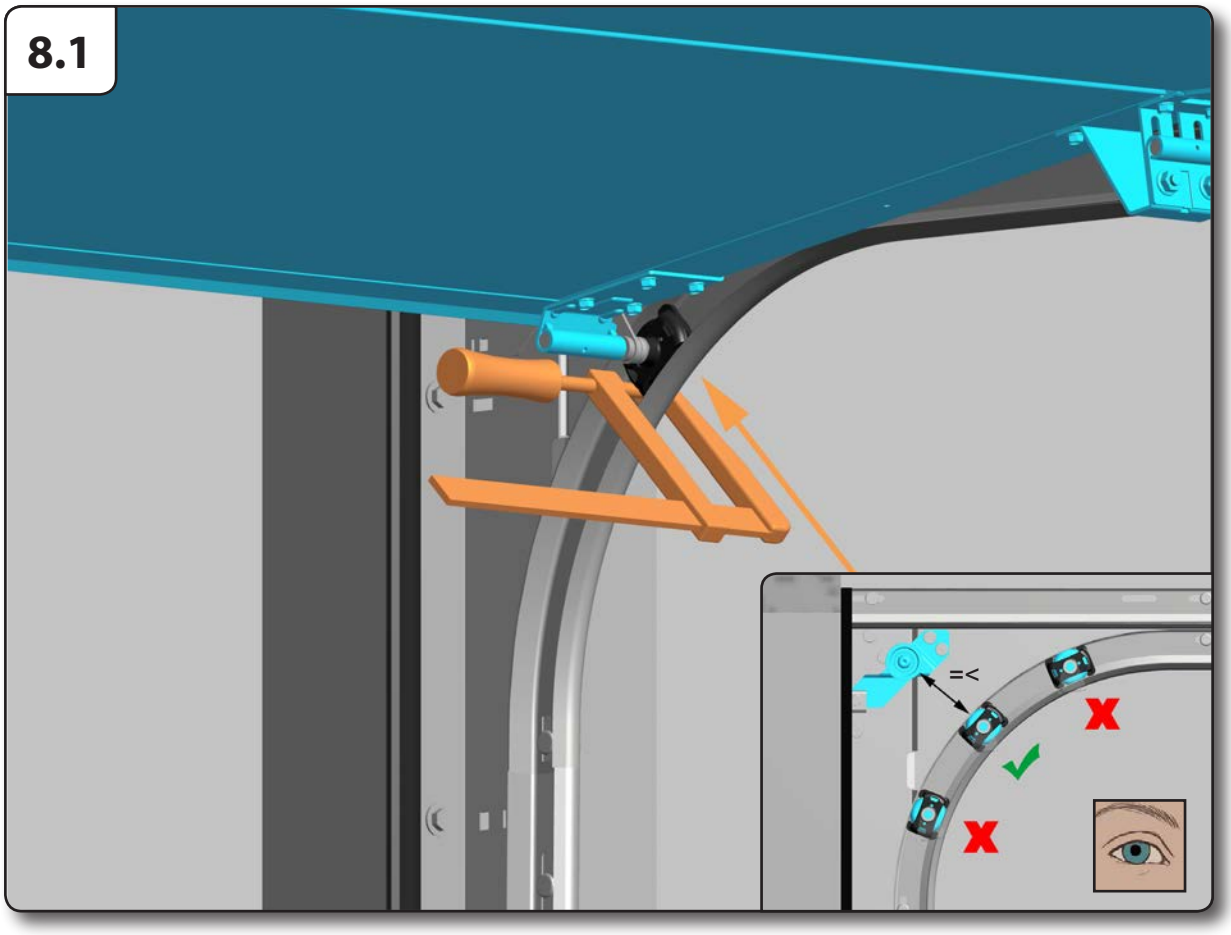
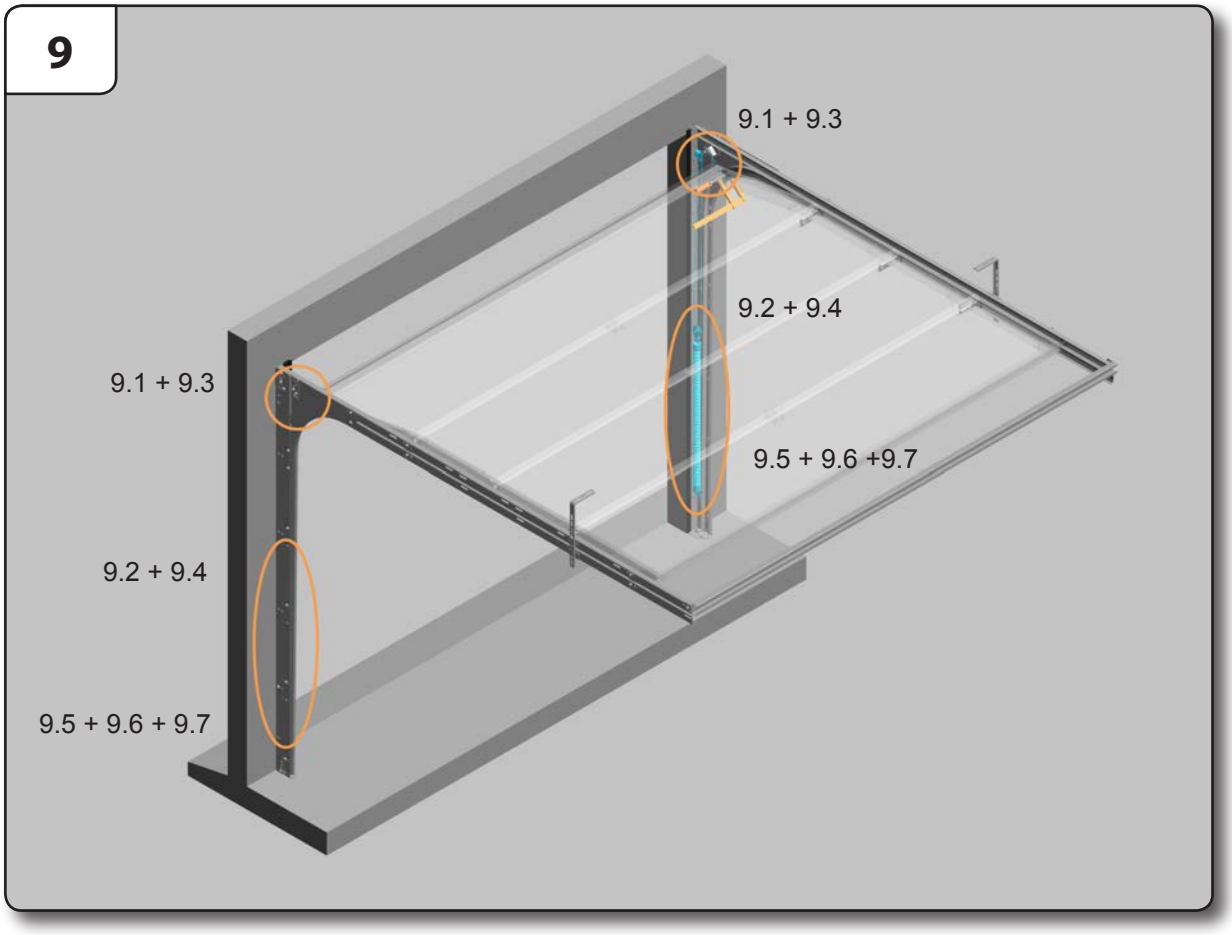
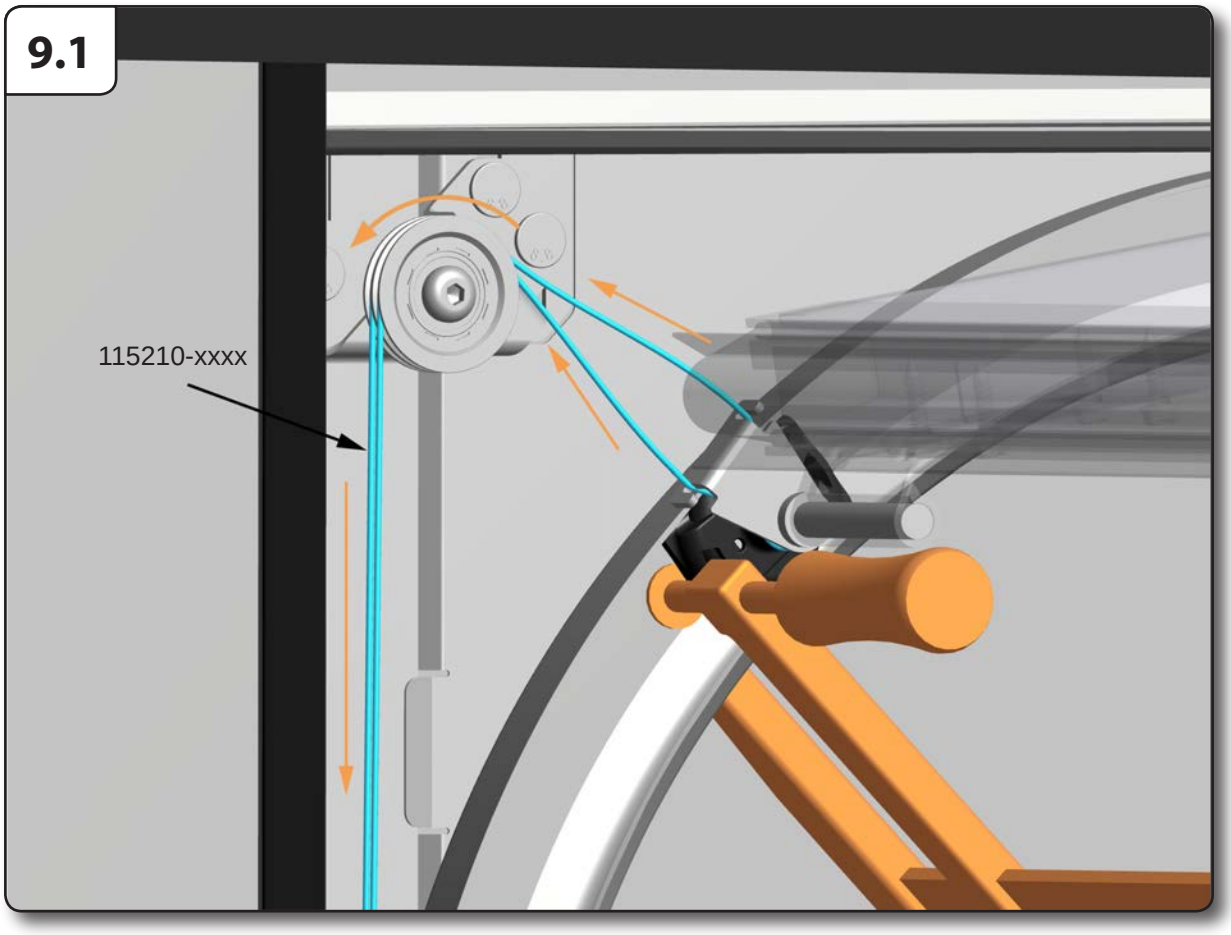
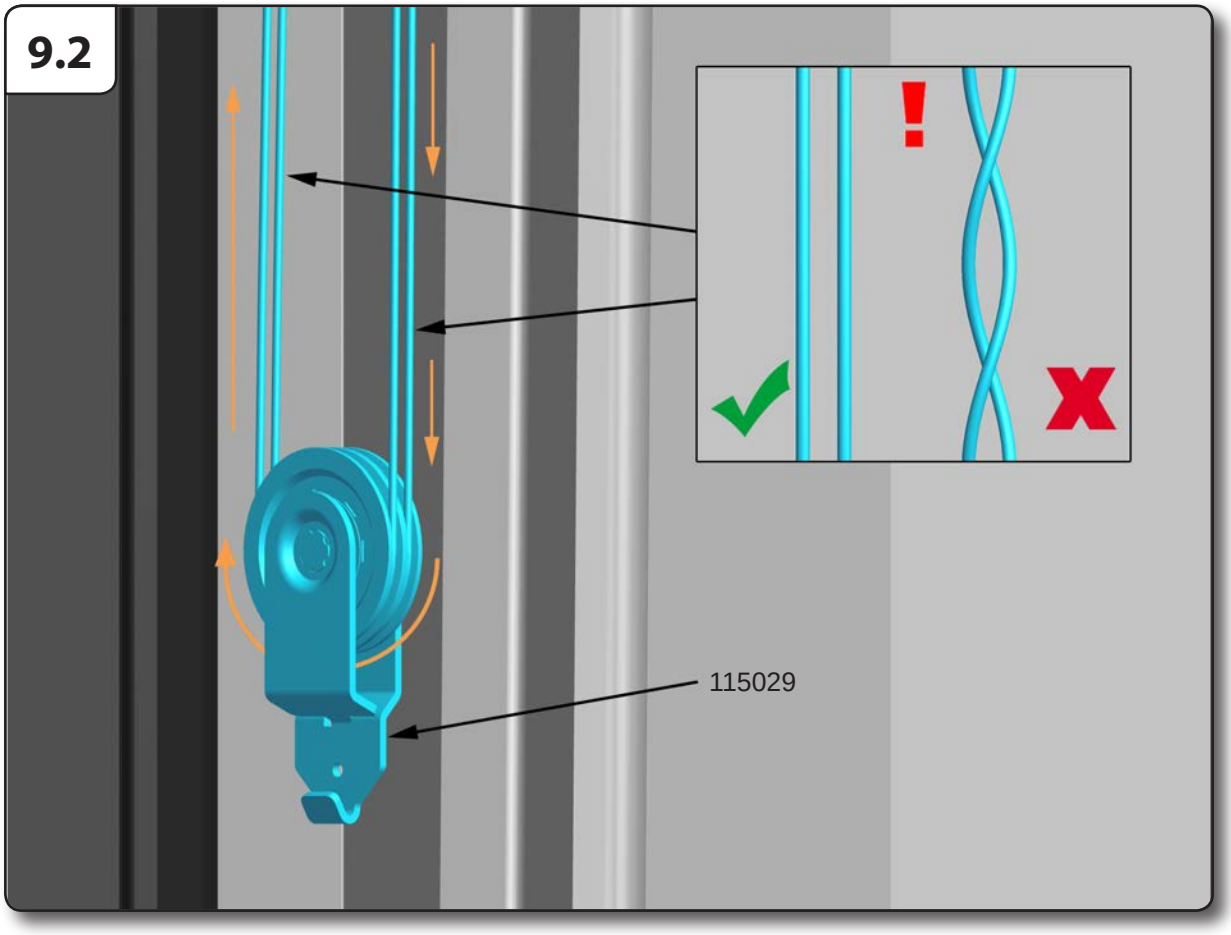
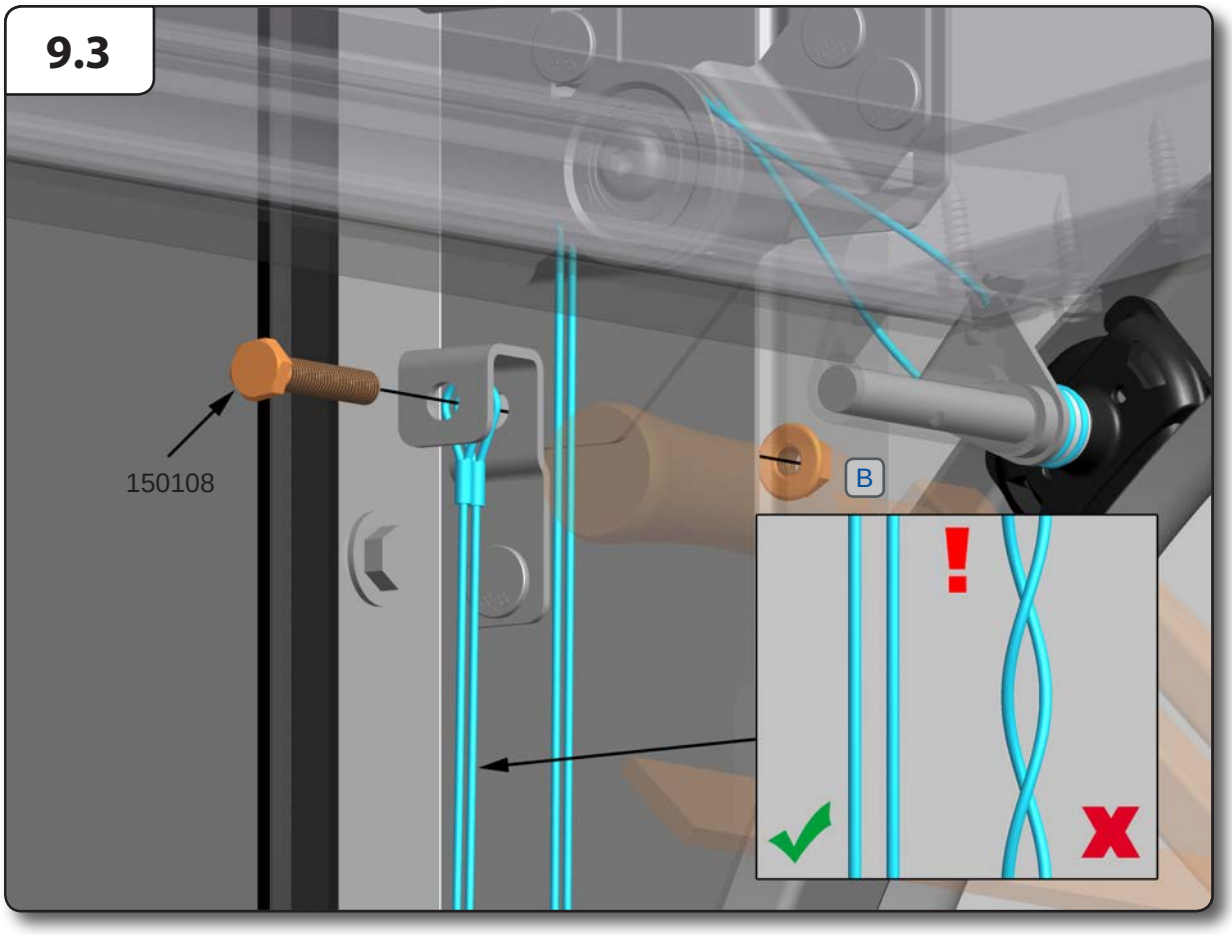
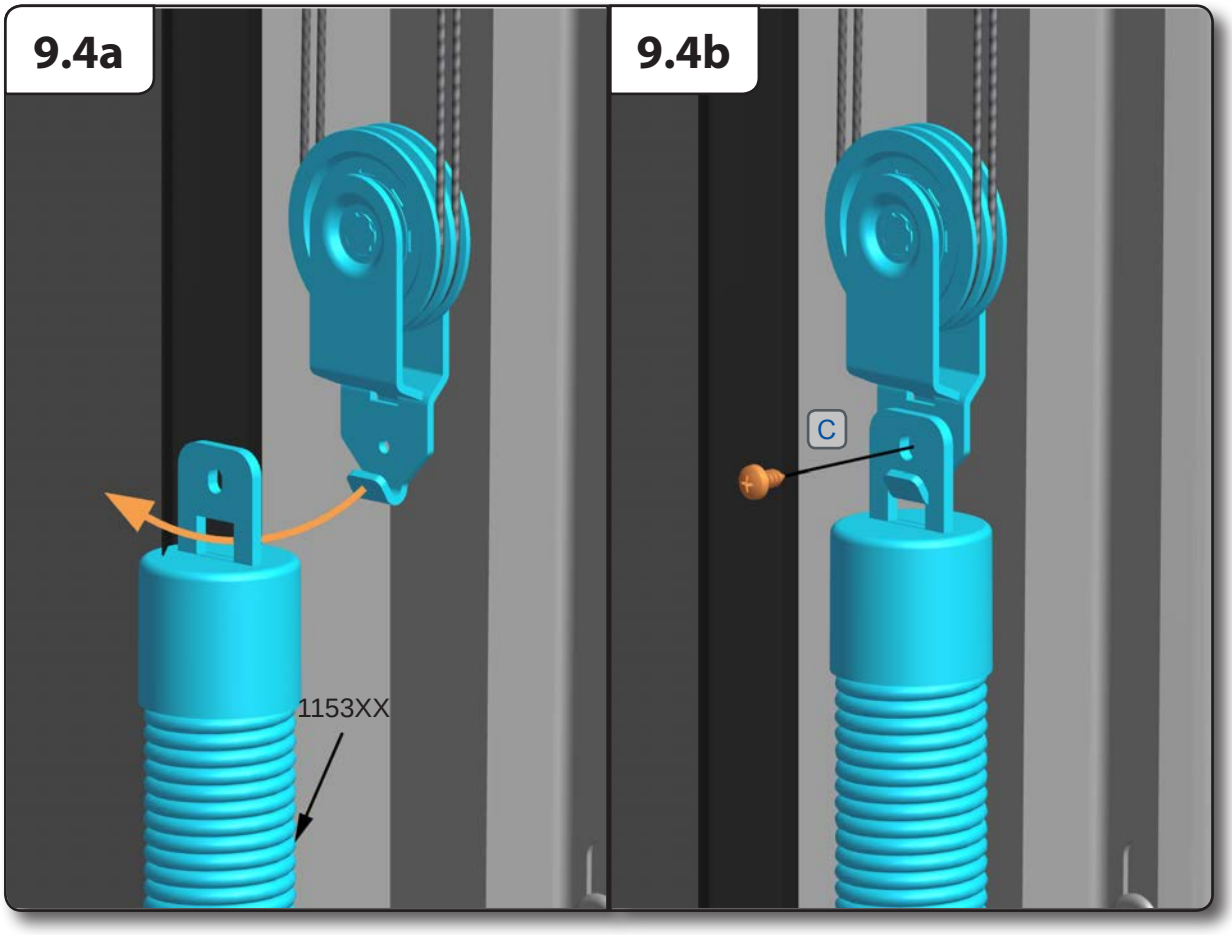

8.1
=<
X
X

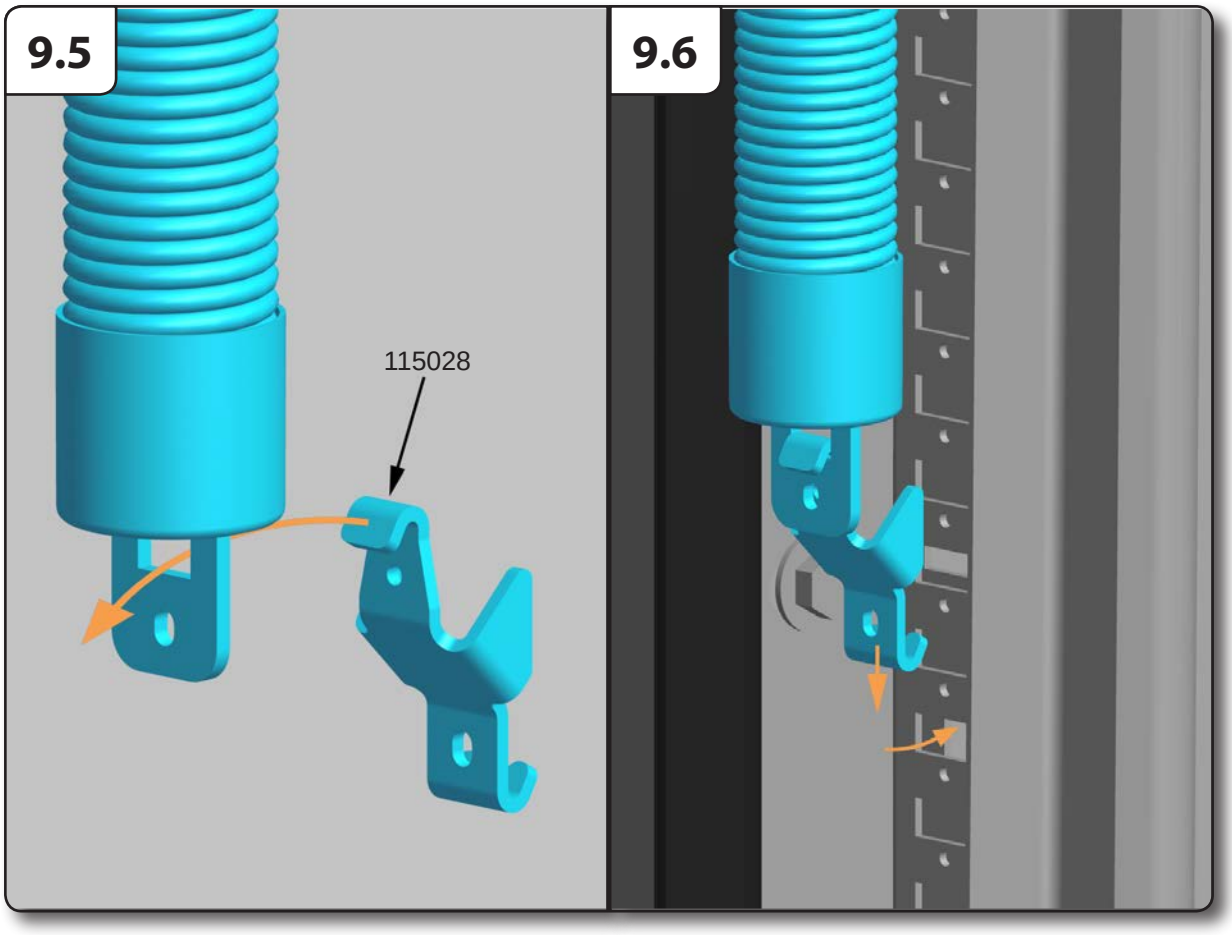

9
9.1 + 9.3
9.2 + 9.4
9.5 + 9.6 +9.7
9.1 + 9.3
9.2 + 9.4
9.5 + 9.6 + 9.7

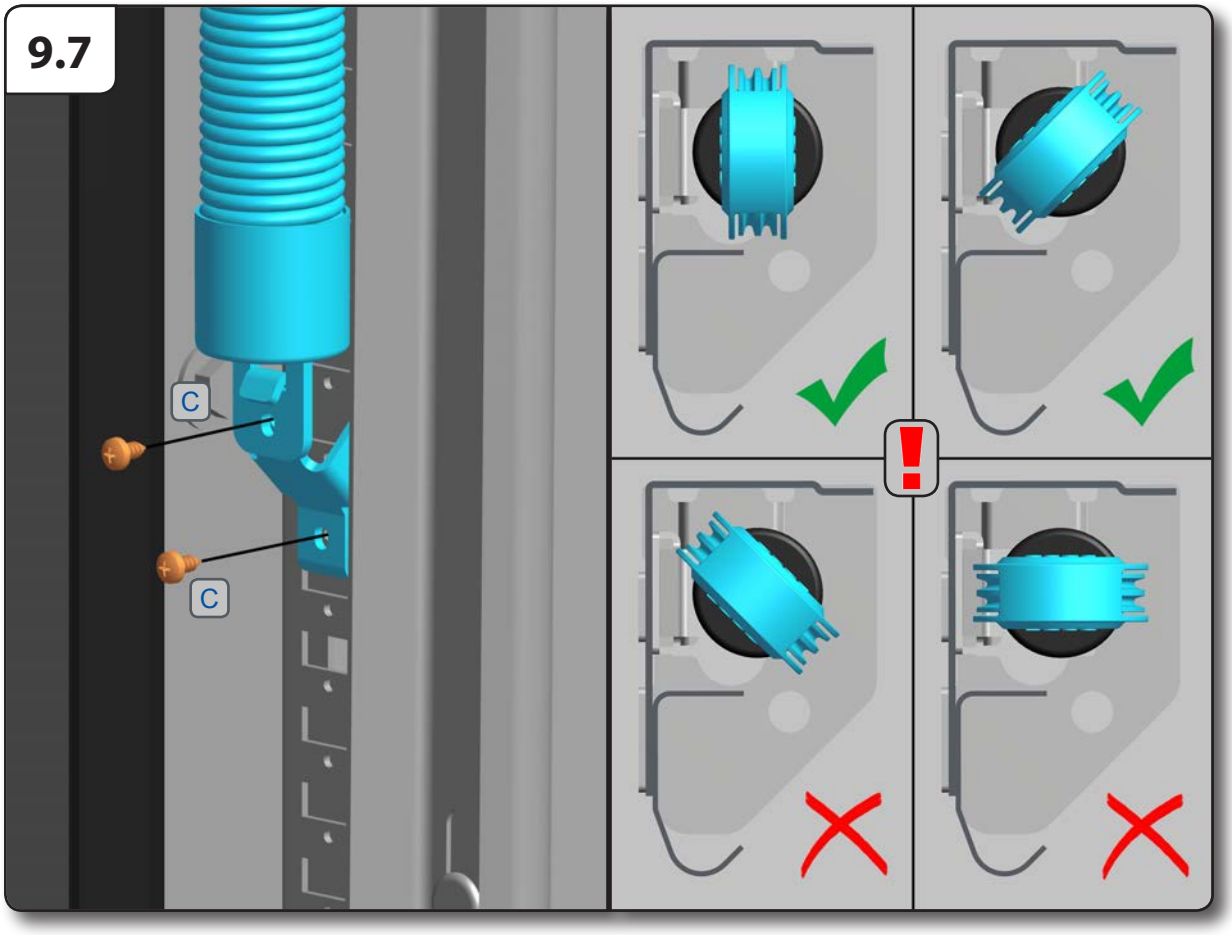

9.1
115210-xxxx

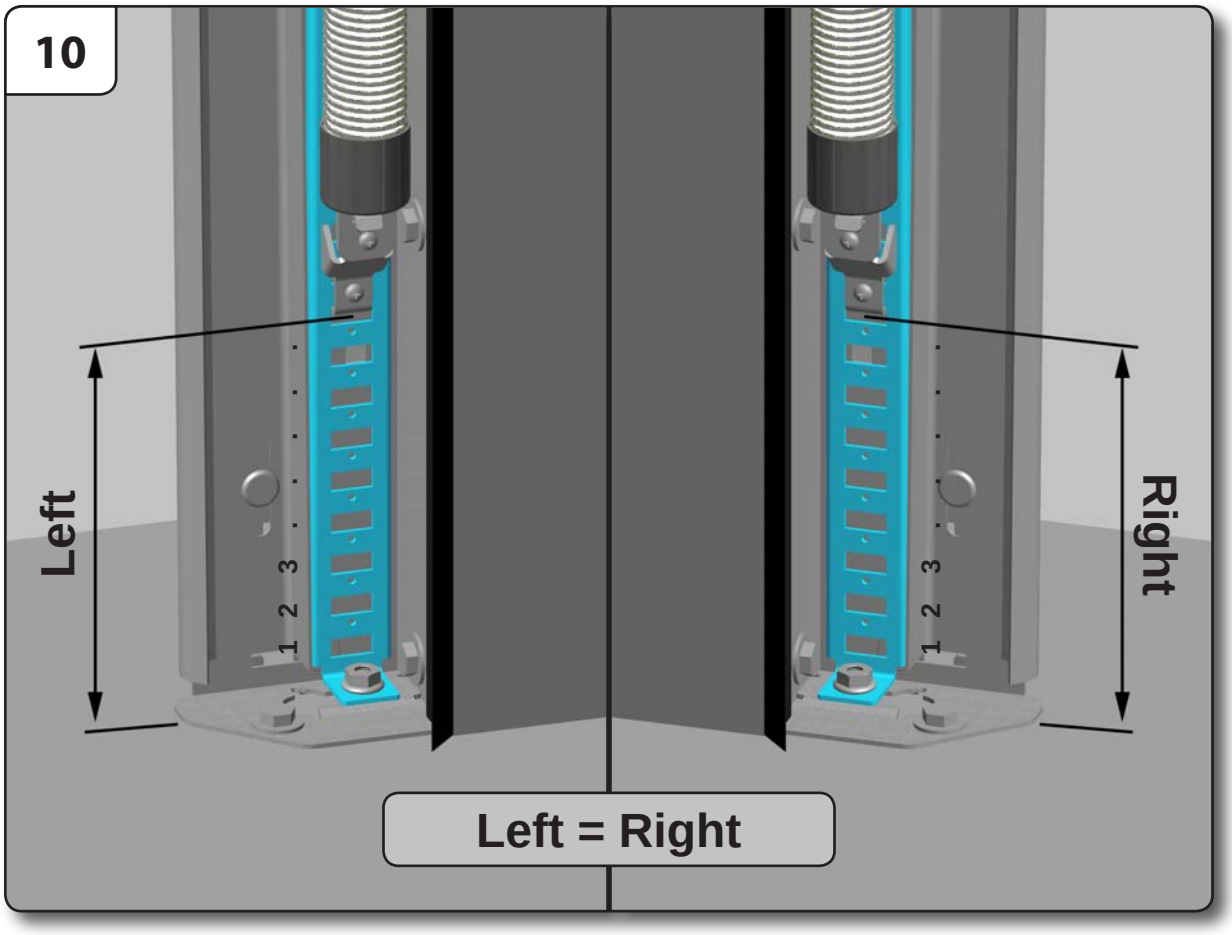

9.2
!
115029

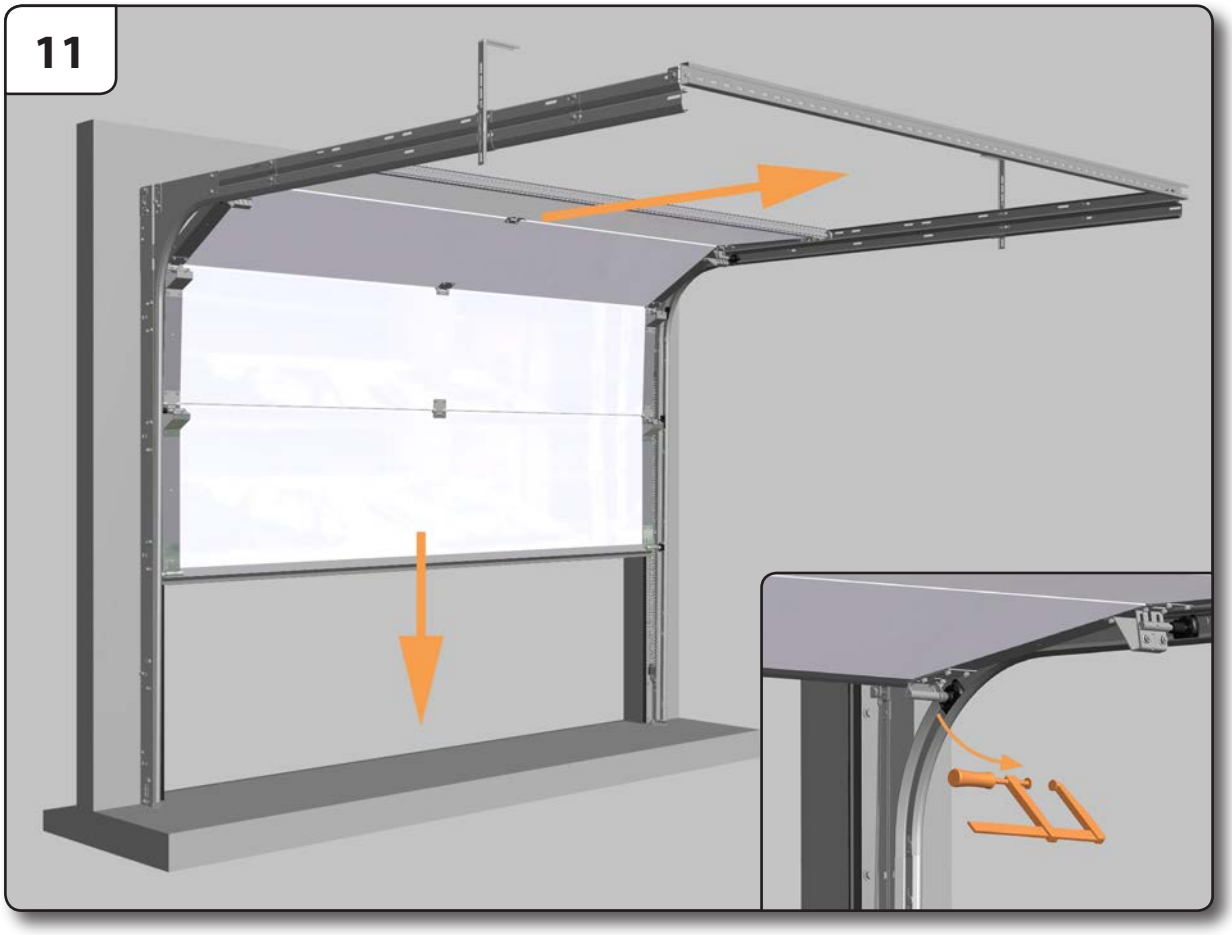

9.3
150108
B
!
X


9.4a
1153XX
9.4b
C


9.5
115028
9.6


9.7
C
C


10
Left
Right
1 2 3
1 2 3
Left = Right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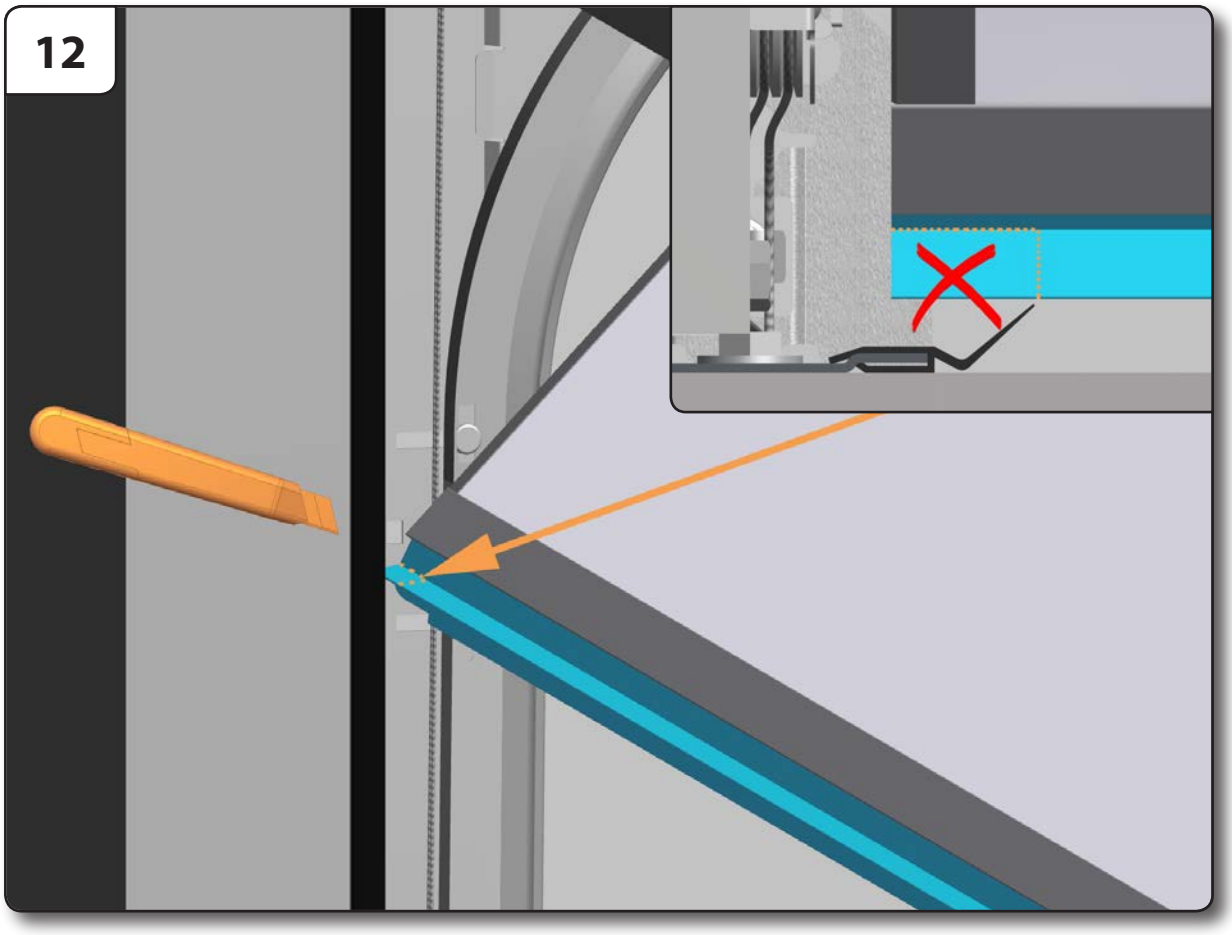
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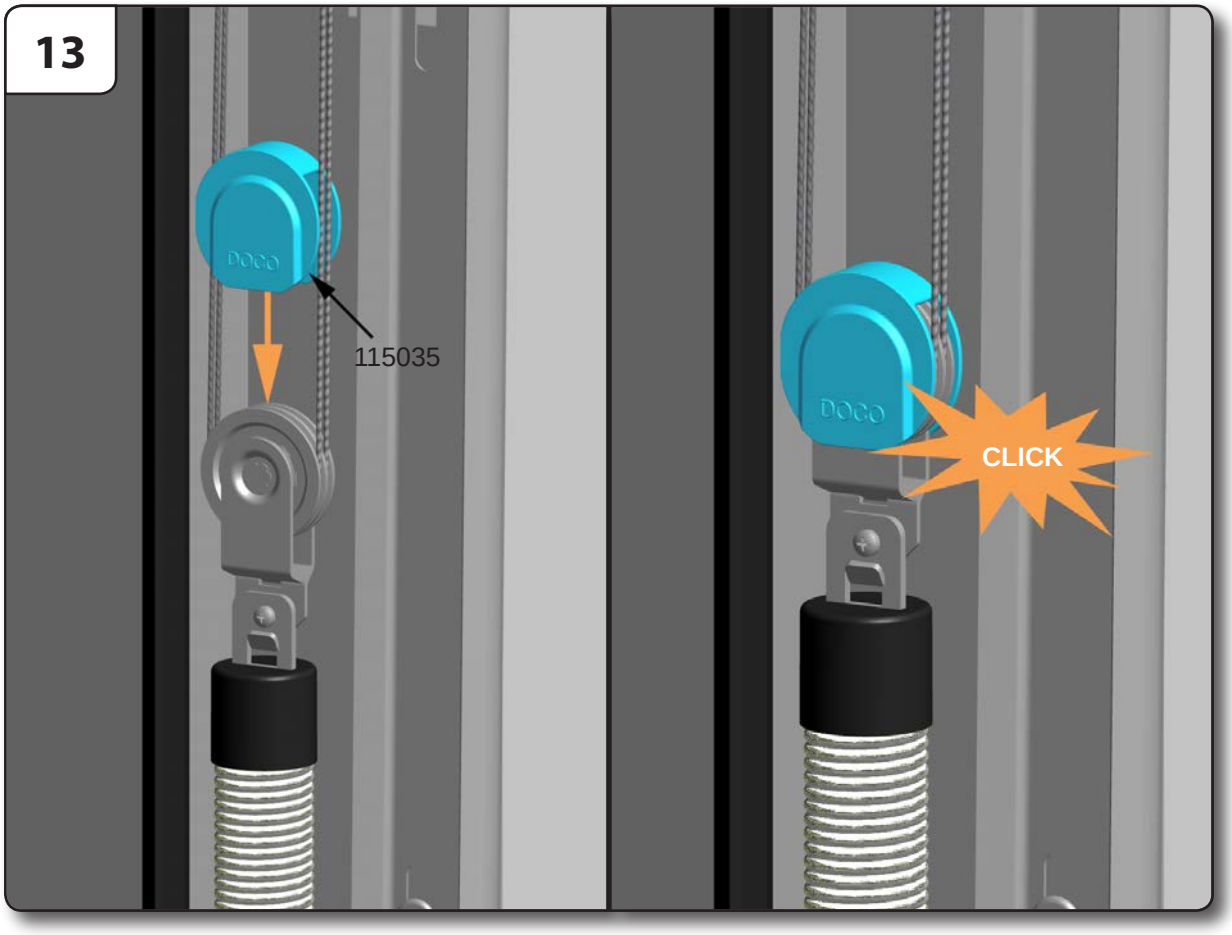
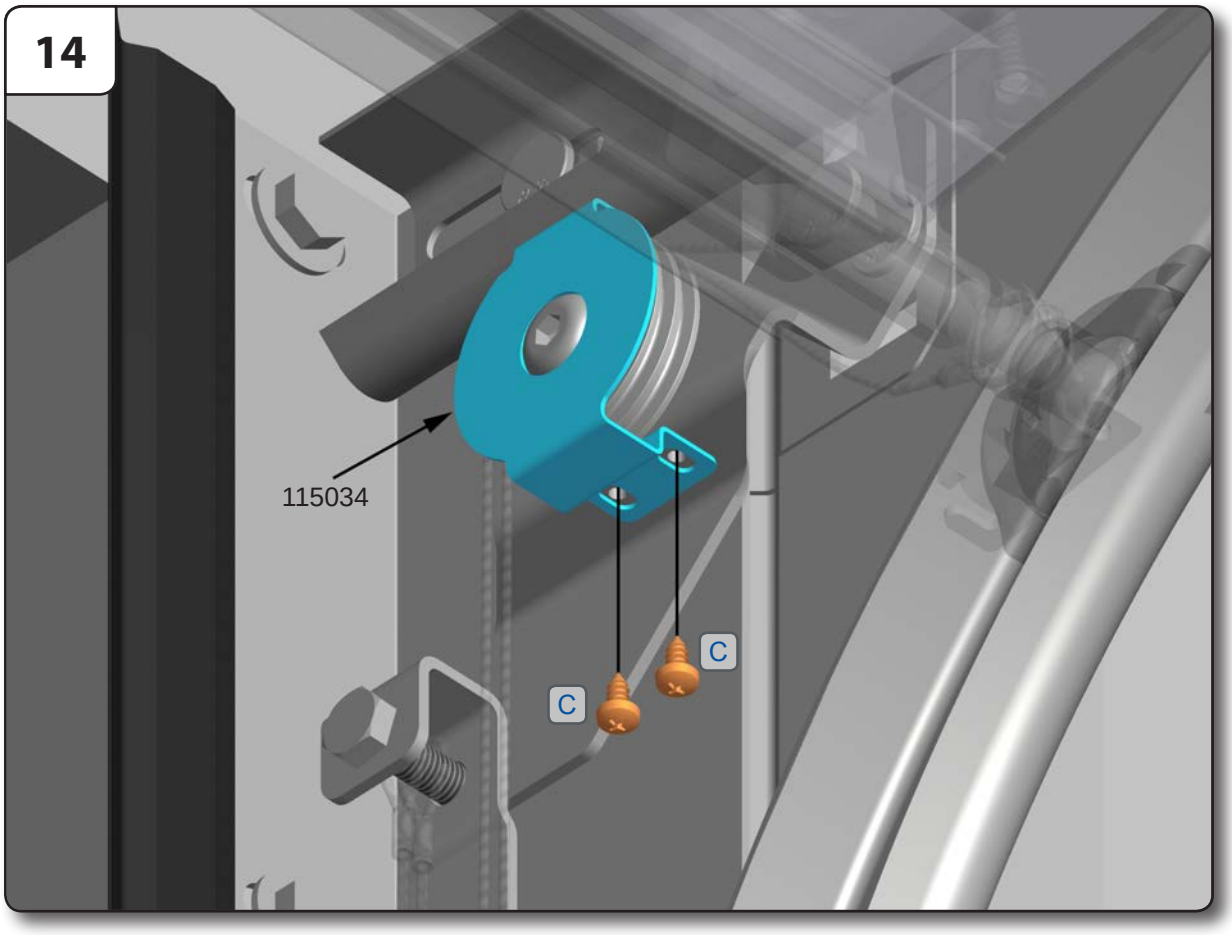
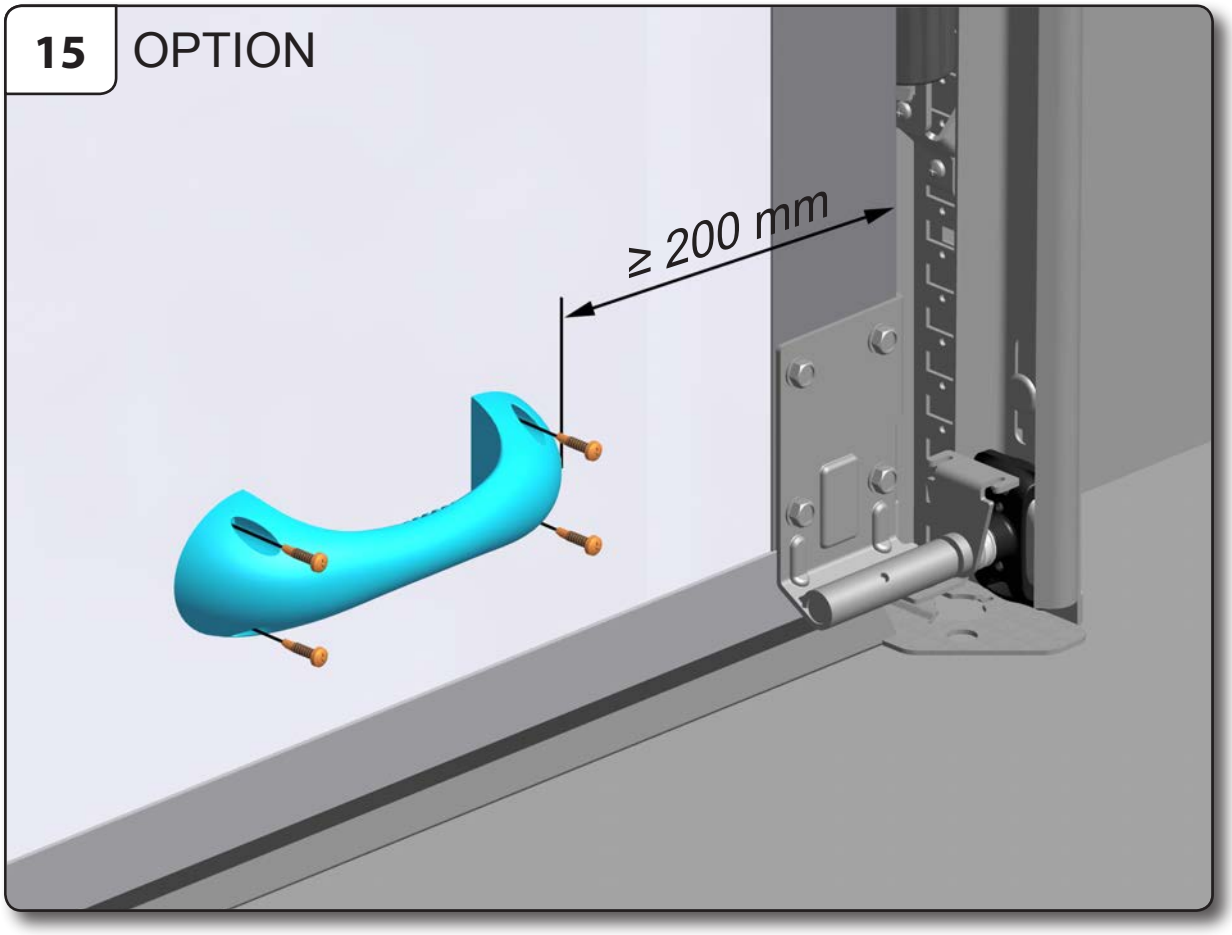
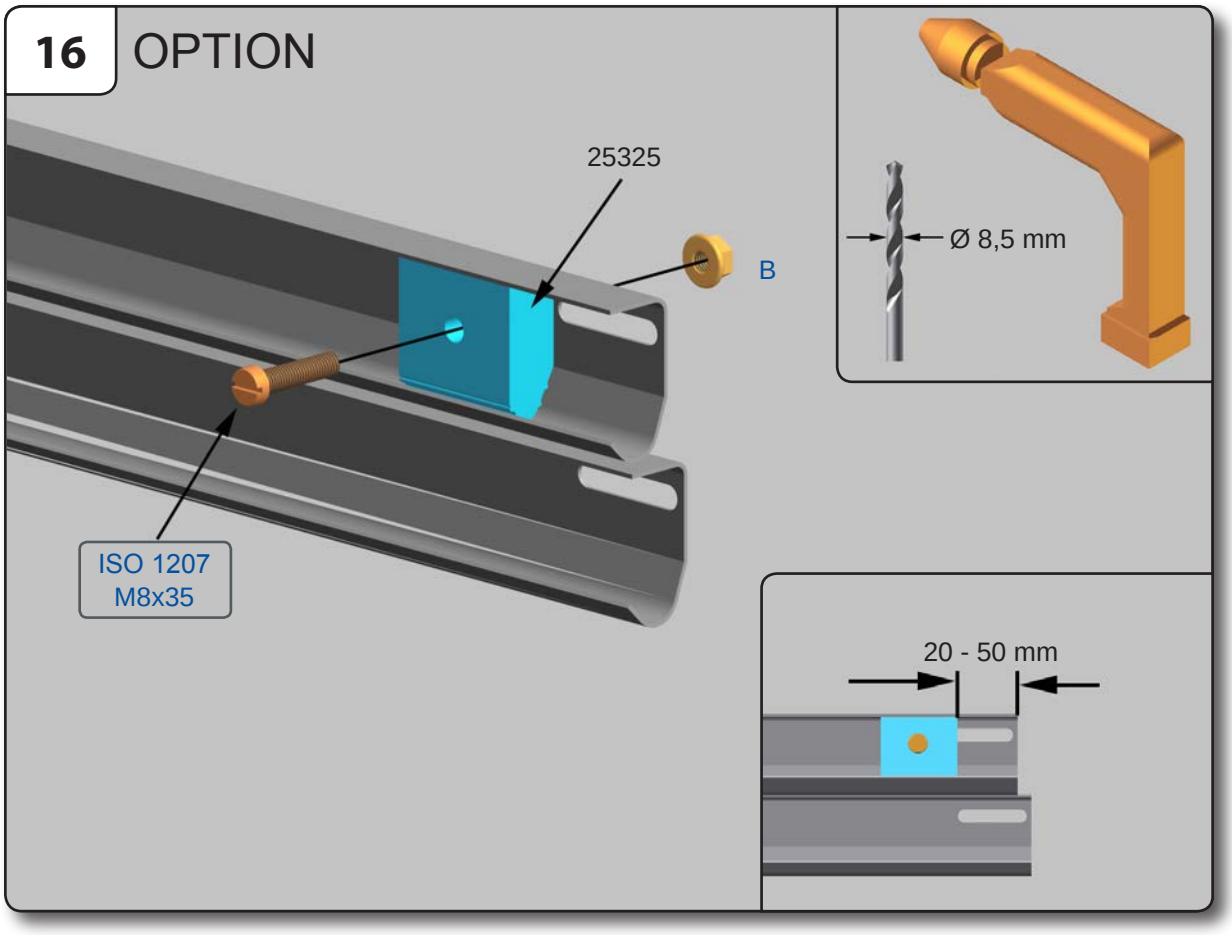
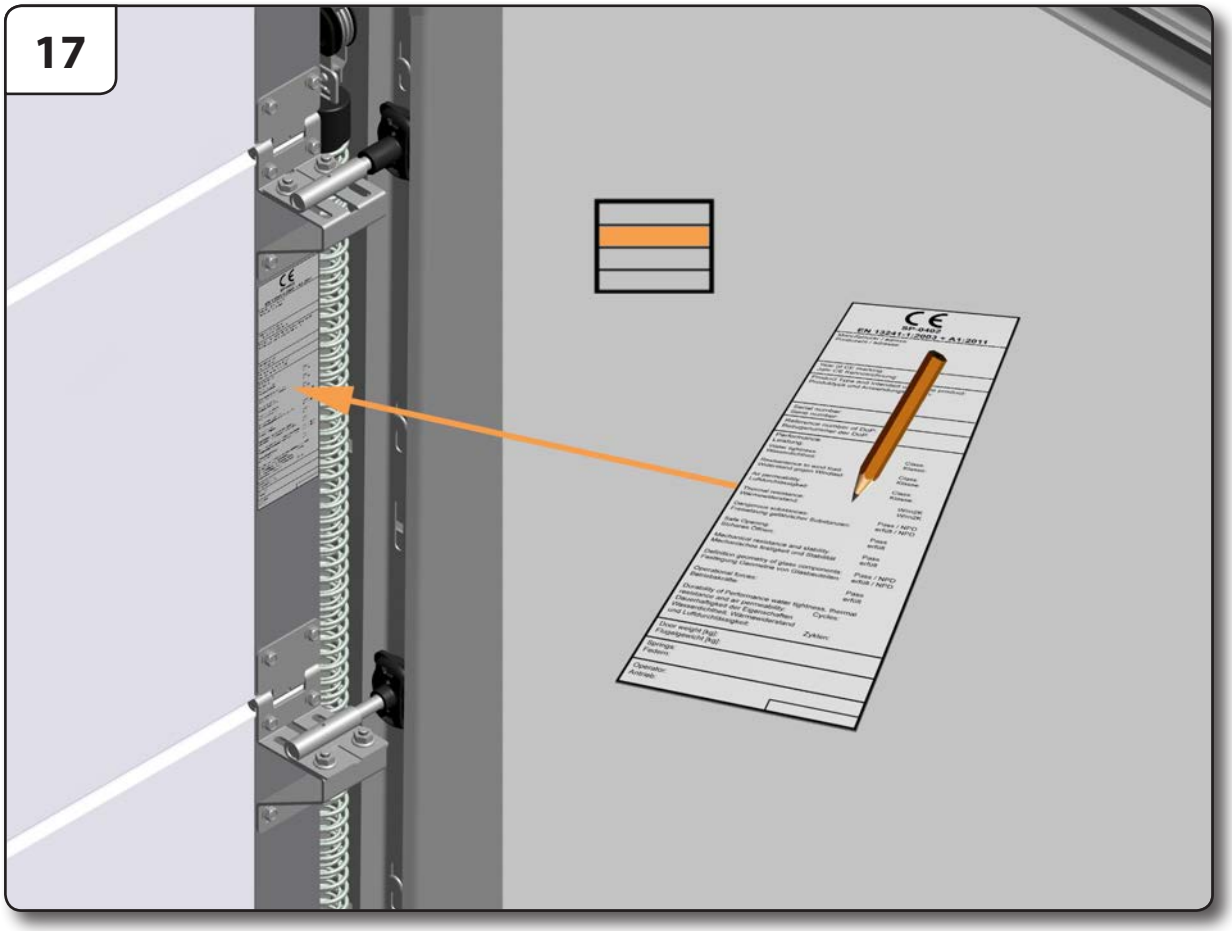

13
115035
CLICK


14
115034
C
C


15
OPTION
≥ 200 mm


16
OPTION
25325
B
Ø 8,5 mm
ISO 1207
M8x35
20 - 50 mm


17

10. First use

The installer must use the Residential Door System **EXS**40**R** for the first time. ALL users must then be instructed.
For more information, check the User Manual.

10.1 Handover

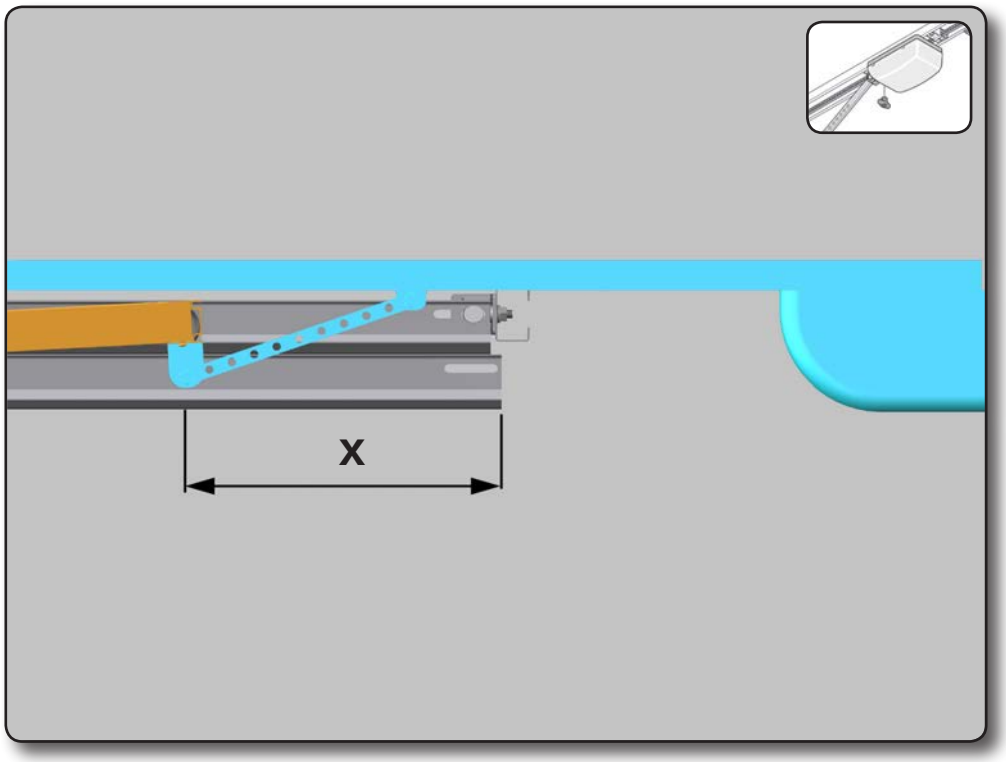
The following documents must be provided to the end user:
- This manual (assembly, maintenance and disassembly)
- User manual
- Service logbook
- Declaration of Performance (DoP)
- Declaration of Conformity (DoC), only in the case of a power operated door.

11. Electric operator (optional)

Mount the operator according to the supplier's manual.

NOTE:
! In the case of power failure, it should be possible to unlock the door using the operator's emergency release.
The door leaf may then only be operated with a handle.
If there is no second entrance to the garage, we recommend that an external release lock (art 280004) is fitted.
Do not fit a pull cord, shoot bolt or lock to an electrically operated door.

! Ensure that the horizontal tracks are long enough for the electrical operator; this is with reference to the operator drawbar (see below). In the event that the tracks are too short, a longer horizontal track kit should be used.



11.1 Operator settings

! Operator settings should be adjusted in accordance with the operator manufacturer's manual.
Please note that our hardware kits have been CE approved for use with the operators specified in our ITT report.
If a different operator is chosen, the installer must then perform a peak force analysis in accordance with EN-12445 and EN-12453.

12. Disassembly

Disassembly should be only carried out by a qualified residential door company/installer.
The door should be disassembled in the reverse sequence to the assembly manual.

12.1 Disposal

All parts of this Residential Door System **EXS**40**R** can be easily disposed of.
Please consult your local authorities on this matter

13. Maintenance

In accordance with EU standards, Residential Door System **EXS**40**R** should be regularly maintained and checked from the first time of use, based on the indicated service by the installer.
Maintenance must be recorded in writing.
Maintenance should be only carried out by a qualified residential door company/installer.

Directly after installing:	**By:**
1. Lubricate the running part of the tracks (advice: PTFE spray)	Installer
2. Lubricate bearings and roller shafts (advice: PTFE spray)	Installer
3. Lubricate pins of the hinges from intermediate and side hinges (advice: PTFE spray)	Installer
4. Lubricate sealing rubbers (advice: special rubber grease or Vaseline)	Installer

After 3 months:	**By:**
1. Check balancing system / Re-tensioning springs (relaxation springs)	Installer
2. Complete visual inspection	Installer

Every 6 months or every 750 door cycles:	**By:**
1. Check Side seal, Top seal and Bottom seal on damage or wear and tear	User
2. Lubricate the running part of the tracks (advice: PTFE spray)	User
3. Lubricate bearings, and roller shafts (advice PTFE spray)	User
4. Lubricate pins of the hinges from intermediate and side hinges (advice: PTFE spray)	User
5. Lubricate sealing rubbers (advice: special rubber grease or Vaseline)	User
6. Clean the panels (advice: car shampoo and water); do not use aggressive detergents	User
7. Wax the panels (advice: car wax)	User
8. Remove dirt from the door and surroundings	User

Every 12 months or every 1500 door cycles:	**By:**
1. Check the cables and the end connections, bottom brackets for wear or damage	Installer
2. Check the balance of the door and adjust if needed / check the manual operation	Installer
3. Check the hinges on wear or damage	Installer
4. Check the pulleys for wear or damage	Installer
5. Check the rollers for wear and damage	Installer
6. Check or test the fixations of the tension springs	Installer
7. Check the closing forces of the main closing edge	Installer
8. Check the suspension from the horizontal track to the ceiling	Installer
9. Check the side seals for wear or damage	Installer
10. Check the bottom seal for wear or damage	Installer
11. Check the seal of the top panel for wear or damage	Installer
12. Check the panels for wear or damage	Installer

14. Replacements of parts

Only use Original DOCO spare parts!
Maintenance should only be performed by a qualified Residential door company / installer

After single spring break:
Replace all springs at once according installation manual

After cable break:
Replace all cable sets at once according installation manual

Supplier

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Fax: +31 (0) 464526894

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Notes:

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